INDEX TO GEOPHYSICAL ABSTRACTS 148–151, 1952

AUTHORS INDEX

	No.	Abstract
Abercrombie, W. F. The practical value of an earth resistivity method in making subsurface explorations	151	14126
Afanas'yeva, V. I., and Kalinin, Yu. D. A peculiarity in the geographic distribution of magnetic storms	149	13572
Aiken, R. W. *See* Howell, B. F., Jr.		
Akademiya Nauk SSSR Izvestiya. Geological facts of cosmogonic significance	148	13417
Akademiya Nauk SSSR Vestnik. The new seismotectonic method of seismic zoning	148	13346
Akima, Tetuo. *See* Miyamura, Setumi.		
Akimoto, Syun-iti. *See* Nagata, Takeshi.		
Alexander, W. A. Geophone, U. S. patent	148	13517
Alfano, Luigi. Studies on the interpretation of vertical electrical sounding	149	13731
Allen, C. F., Lombardi, L. V., and Wells, W. M. The application of the reflection seismograph to near-surface exploration	151	14119
Alpher, R. A., and Herman, R. C. The primeval lead isotopic abundance and the age of the earth's crust	148	13375
Altenburg, Kurt. Dispersion of longitudinal body waves	150	13839
Anderson, Johannes, and Nerenst, Poul. Wave velocity in concrete	149	13602
Angona, F. A. Apparatus for measuring interstitial water content of well cores, U. S. patent	150	14003
Archie, G. E. Classification of carbonate reservoir rocks and petrophysical considerations	149	13761
Arnold, J. R., and Libby, W. F. Radiocarbon dates	148	13379
Arps, J. J. Well or borehole logging, U. S. patent	148	13539
Arrhenius, G., Kjellberg, G., and Libby, W. F. Age determination of Pacific chalk ooze by radiocarbon and titanium content	150	13888
Arvela, A. J. Magnetic variometer, U. S. patent	149	13775
Asada, Toshi, Suzuki, Ziro, and Tomoda, Yoshikumi. Notes on the energy and frequency of earthquakes	150	13862
Avershin, S. G. Rock burst in the mines of Kizel basin	150	13879

B

Baker, J. T. *See* Bayhi, J. F.		
Ballentine, Robert. *See* Bernstein, William.		
Balsley, J. R., Jr. *See* Rumbaugh, L. H.		
Bankovskiy, V. A. Geothermal conditions in the Nesvetayevo-shakhta syncline	149	13645
Baranov, V. Quantitative interpretation of the data of exploration by telluric currents	149	13734
Barret, W. M. Method of electrical prospecting, U. S. patent	148	13531
——— Note on the radio transmission demonstration at Grand Saline, Tex	150	13957
——— Transmitting and receiving apparatus for electromagnetic prospecting U. S. patent	148	13532
Barthelmes, A. J. Method for determining subsurface geological structure by seismic surveying employing refraction shooting, U. S. patent	149	13783
Bartlett, H. H. Radiocarbon datability of peat, marl, caliche, and archaeological materials	148	13380
Basham, R. B., and Macune, C. W. Apparatus for locating binding areas around well casing, U. S. patent	150	14000
——— The delta log, a differential temperature surveying method	150	13977

	No.	Abstract
Bâth, Markus. Earthquake magnitude determination from the vertical component of surface waves	148	13342
——— Initial motion of the first longitudinal earthquake wave recorded at Pasadena and Huancayo	150	13854
——— The distribution of microseismic energy with special reference to Scandinavia	148	13370
——— The microseismic importance of cold fronts in Scandinavia	148	13369
Battey, M. H. Recent eruption of Ngauruhoe	148	13414
Baule, Heinrich. Seismic velocity measurements in carbonaceous rocks underground	148	13339
Baxter, A. J. Continued research improves new exploration tool	150	13936
Bayhi, J. F., and Baker, J. T. Seismic prospecting with optimum geophone coverage, U. S. patent	151	14159
Beagley, J. W. Geomagnetic sudden commencement analysis—Amberley	151	14021
Beard, C. I. *See* Yost, W. J.		
Beaufils, Yvonne. Spectral analysis of rapid variations in telluric currents	150	13838
Beaufils, Yvonne, Gibault, Gaston, and Kunetz, Géza. Rapid variations of telluric currents and the geomagnetic field	151	14030
Becker, Adrian. *See* Swan, B. G.		
Beckman, A. O., Herd, H. H., and Robinson, A. D. Dosimeter, U. S. patent	151	14171
Belîakov. *See* Belyakov.		
Belluigi, Arnaldo. A new geoelectric inductive apparatus for exploration for subsurface conductors, especially in mine galleries	149	13737
Belousov, V. V. The problem of the interior structure of the earth and its evolution	148	13425
Belousov, V. V., Kirillova, I. V., and Sorskiy, A. A. A brief review of the seismicity of the Caucasus in relation to its tectonics	151	14058
Belyakov, M. F. Geothermal anomalies in the Dnieper-Donets depression	148	13394
Benioff, Hugo, and Gutenberg, Beno. The response of strain and pendulum seismographs to surface waves	151	14038
Benioff, Hugo, Ewing, Maurice, and Press, Frank. Sound waves in the atmosphere generated by a small earthquake	148	13334
Berel'kovskiy, Ts. Ya., and Zubanov, B. G. The determination of an inclined contact by the electrical method	150	13950
Berg, Helmut. The earthquake near Euskirchen in the Rhineland on March 8, 1950	149	13612
Berg, J. W., Jr. Conductivity study of aqueous kaolin-NaCl mixtures	148	13496
Bergstrom, S. *See* Hersey, J. B.		
Berlage, H. P. Some remarks on the internal constitution of the bodies of the solar system	149	13683
Bernard Pierre. Interpretation of the 11-year variation of the horizontal component of the geomagnetic field	150	13833
——— The segregation of the 11-year variation of the horizontal component of the geomagnetic field by linear combinations of ordinates	150	13834
Bernert, Traude. Determinations of the radium content of deep-sea sediments	150	13887
Bernstein, William, and Ballentine, Robert. Radioactive particle counting, U. S. patent	151	14170
Berson, L. S. Seismic waves in a vertically stratified medium	151	14170
——— The revealing of dynamic properties of seismic records as influenced by differences in the sensitivity of individual receiving channels	148	13459
Berson, I. S., and Yepinatyeva, A. M. On multiple refracted waves	151	14112
Bilhartz, H. L. Method for measuring resistivity of earth samples, U. S. patent	151	14162
Binggeli, Edmond, and Haenny, Charles. Measurement of the radioactivity of the water from Lavey spring	151	14069
Biot, M. A. The interaction of Rayleigh and Stoneley waves in the ocean bottom	149	13592
Birch, Francis. Elasticity and constitution of the earth's interior	149	13682
	151	14075
Bird, P. H. Experience with geophysics in New York state	151	14089
Bliss, W. L. Radiocarbon contamination	149	13642
Boaga, Giovanni and Tribalto, G. Western G. C. gravimeter No. 49 of the Servizio Geologico d'Italia	150	13815

	No.	Abstract
Boaga, Giovanni, Tribalto, G., and Zaccara, Gaetano. Contribution to the construction of the gravimetric map of Italy, 1st loop	150	13820
——— Contribution to the construction of the gravimetric map of Italy, 2nd loop	150	13821
——— Geogravimetric surveys in the region of Castellana caverns, Bari province	150	132924
Bödvarsson, Gunnar. *See* Einarsson, Trausti.		
Bollo, Robert, and Gougenheim, A. Periodic variation of gravity at a point	149	13555
Bonelli Rubio, J. M. Contribution to the study of the eruption of the Nambroque or San Juan volcano (Palma Island) of June 24–August 4, 1949	148	13404
Borchert, H., and Trögen, E. On the layering of the Earth's crust from geophysical and petrologic points of view	149	13680
Borkowski, C. J., and Fairstein, Edward. Proportional counter, U. S. patent	149	13791
Börner, Rudolf. Geophysical investigations of the ground with the "Geoskop", "Geostratimeter" and some additional measuring procedures	150	13951
Borrego Gonzalez, Joaquin. A new precise two-way switch for compensation in the direct-current electrical method with an opposing potentiometer	149	13738
Boucher, F. G. Gravity and density gradiometer, U. S. patent	151	14144
———Gravity meter, U. S. patent	150	13978
Boulanger. *See* Bulanzhe.		
Bouwer, R. F. *See* Simpson, D. J.		
Bowen, W. A., Jr. *See* Singer, S. F.		
Brajnikov, Boris. On a possible source of error in the determination of geologic age from uranium minerals	148	13377
Brant, A. A. Drill hole magnetometer apparatus, U. S. patent	149	13801
———Geophysical exploration, U. S. patent	150	13991
———Resistivity method for determining ore continuity, U. S. patent	149	13790
Brasil Conselho nacional do petróleo. Annual report of 1950	149	13688
Brattain, W. H., Klein, N. E., and Richardson, M. S. Magnetometer head, U. S. patent	150	13979
Breger, I. A., and Whitehead, W. L. Radioactivity and the origin of petroleum	149	13637
Breusse, J. J. *See* Castany, Gilbert.		
Brewer, A. W., and Jarman, C. A. Apparatus for the measurement of magnetic fields, U. S. patent	150	13980
Brinckmeier, G., and Helms, Hans von. Determination of the rim and flanks of salt domes by seismic refraction methods	148	13469
Brodie, J. W. Features of the sea-floor west of New Zealand	151	14081
Broding, R. A., Zimmerman, C. W., Somers, E. V., Wilhelm, E. S., and Stripling, A. A. Magnetic well logging	148	13490
See also Summers, G. C.		
Brouwer, H. A. The movement of island arcs	149	13674
Brown, Harrison. *See* Suess, H. E.		
Brownwell, G. M. *See* Lundberg, Hans.		
Brownlow, C. L. Line fault detector, U. S. patent	148	13547
Bruckshaw, J. M. The age of the earth	149	13630
Buck, W. K. Geological mapping, structural problems, and the magnetometer	148	13438
Bugaylo, V. A. Equation of the (n–1) segment of the travel time curve of refracted waves	151	14111
———Rapid determination of total travel times for reflected waves from horizontal structures	151	14113
Bulanzhe, Yu. D. On some systematic errors of gravimeters with horizontally stretched quartz fiber	150	13813
Bulashevich, Yu. P. Relations between electrical and gravity anomalies	151	14133
Bullard, E. C. The origin of the earth's magnetic field	151	14015
Bullard, E. C., and Niblett, E. R. Terrestrial heat flow in England	148	13392
Bullard, F. M. Parícutin, Mexico's newest volcano	149	13654
Bullerwell, W. Gravimeter observations comparing pendulum stations at Cambridge, York, Newcastle upon Tyne, Edinburgh and Aberdeen	150	13816
Burg, K. E. Exploration problems of the Williston basin	150	13940
Burke, W. E. Air drilling in seismic surveys	150	13944
Burling, R. L. Determination of geologic time	150	13881
———The age of the elements	148	13376
Burns, W. F. *See* Hess, V. F.		

	No.	Abstract
Burtin, Jean. The new Schlumberger procedure and its use in exploratory drill holes for lignite, coal, and water	151	14140
Bush, R. E. Interpretation of radioactivity logs in reef limestone	149	13770
Bush, R. E., and Mardock, E. S. The quantitative application of radioactivity logs	150	13975
Butterworth, G. J. Circuit control for well-surveying instruments, U. S. patent	149	13797
Byerly, Perry. Pacific Coast earthquakes	150	13864
——Theory of the hinged seismometer with support in general motion	151	14037

C

Cabrera Kabana, Manuel. On the origin of the Canary Islands	149	13662
Caldwell, R. L. *See* Yost, W. J.		
Caloi, Pietro. Geophysical interpretation of geodetic measurements	149	13553
——On the origin of microseisms, with particular reference to the upper Adriatic	149	13625
——The effect of the inner friction on the velocity of very short period surface waves	149	13593
Campbell, J. L. P. Radioactivity well logging anomalies	148	13504
Canada Geological Survey. Aeromagnetic maps of the Province of Alberta	148	13450
——Aeromagnetic maps of the Province of New Brunswick	148	13451
——Aeromagnetic maps of Northwest Territories	148	13452
	149	13705
	150	13929
	151	14101
——Aeromagnetic maps of the Province of Ontario	148	13453
	150	13931
——Aeromagnetic maps of the Province of Quebec	148	13454
	149	13706
	150	13930
	151	14100
Cantos Figuerola, José. An excursion to the oil fields of Schoonebeck in Netherlands	148	13429
——A procedure of application and interpretation of the seismic method	149	13713
	151	14109
——Geophysical well testing	149	13743
Carlisle, C. H. Seismic exploration method, U. S. patent	151	14155
Carnera, Luigi. Variations of latitude and the movement of the pole of the earth's rotation during 1946–48	151	14082
Carpenter, J. F. *See* Purbrick, R. L.		
Cartier, W. O., McLaughlin, G. H., and Robinson, W. A. System of airborne conductor measurements, U. S. patent	151	14165
Casertano, Lorenzo. *See* Imbò, G.		
Castany, Gilbert, and Breusse, J. J. The sill of Gafsa	148	13481
Cattala, Louis. On the distribution of gravity anomalies on the island of Madagascar	149	13564
Chapman, Sydney. The normality of geomagnetic disturbances at Huancayo	149	13576
Charlier, Charles. Screening effect of a coal layer on the propagation of seismic waves and on the form of isoseismal lines	148	13343
Charlier, Charles, and Jones, L. Contributions of seismology, gravimetry, and geodesy to the present knowledge of the earth's crust in Belgium. Remarkable agreement of results	148	13300
Chebotarev, I. I. Hydrological and thermal aspects of petroleum occurrence	150	13962
See also Fourmarier, Paul.		
Cheney, Richard. The flying prospectors	148	13443
Cherry, L. T. *See* Purbrick, R. L.		
Clark, A. N., and Mungal, A. G. Scale model experiments in electromagnetic methods of geophysical exploration	151	14131
Claude, Georges. On the Péchelbronn anomalies	150	13893
——The thermal anomalies of Péchelbronn	149	13646
Clayton, Neal. Geophysical exploration in the San Juan basin	151	14087
——Weathering and other surface shooting problems	148	13466
——Western Anadarko basin geophysical problems	148	13457

	No.	Abstract
Cloud, R. T. Gravity meter, U. S. patent	151	14143
Collins, B. W. *See* McKellar, I. C.		
Colton, F. B. Our home-town planet, Earth	148	13424
Conforto, B. *See* Penta, F.		
Congdon, R. L. Seismometer, U. S. patent	148	13520
Constable, J. M. Geiger tube radiation meter, U. S. patent	148	13535
Contini, Camillo. The calculation of reflecting surfaces in reflection seismic surveying	151	14114
Cook, A. H. A measurement of the difference of gravity between the National Physical Laboratory, Teddington and the Ordnance Survey Office, Southampton	150	13817
——— An investigation of the errors of some recent gravimeter observations	148	13293
——— The gravitational attraction of a deposit of clay	150	13825
Cook, J. C. An analysis of airborne surveying for surface radioactivity	151	14138
Cooper, R. I. B. The distribution of radioactivity	149	13634
Coron, Suzanne. Attempt at the interpretation of the isostatic anomalies of the Paris Basin	150	13824
——— Isostatic compensation of light masses situated beneath the geoid. Application to the interpretation of the isostatic anomalies of the Paris Basin	150	13823
Cotell, R. D. *See* Crary, A. P.		
Coulomb, Jean. Love waves of the Queen Charlotte Islands earthquake of August 22, 1949	148	13336
——— On the nature of *T*-waves produced by submarine earthquakes	151	14046
Coulomb, Jean, and Molard, Pierre. Propagation of *T* phase waves in the Caribbean Sea	150	13859
Craggs, D. E. Measurement of fluid flow in boreholes by radioactivity, U. S. patent	151	14178
Cram, I. H. Exploratory bottlenecks	149	13693
Crary, A. P., and Cotell, R. D. Ice islands in Arctic research	151	14050
Crary, A. P., Cotell, R. D., and Oliver, Jack. Geophysical studies in the Beaufort Sea, 1951	149	13556
Crede, C. E. Seismic frame structure, U. S. Patent	148	13524
Cucuzza Silvestri, Salvatore. On the various types of volcanic explosions observed on Etna during the year 1947	148	13405
——— The eruption of Mount Etna of 1947	149	13656
	150	13897
Cullington, A. L. The magnetic secular variation in New Zealand	150	13830
Cunningham, B. B. *See* Fleming, E. H. Jr.		
Curtiss, L. F. *See* Krasnow, Shelley.		

D

Daly, J. W., and Page, C. N. Seismograph interpretation as related to changes in sedimentary section in west Texas and New Mexico	149	13721
Danilevich, S. I. The part of potassium in radioactivity of the earth according to recent data	149	13631
Danilov, V. V. Horizontal deformations of the earth's crust caused by the earthquake of September 1, 1923, in the Kanto district, Japan	148	13366
de Bruyn, J. W. Isogam maps of Caribbean Sea and surroundings and off southeast Asia	149	13557
Decker, G. J., and Martin, Maurice. The Laterolog and salt-mud well logging in Kansas	149	13764
De Geer, E. H. Conclusions from C^{14} and De Geer's Chronology. Dani-Gotiglacial, with datings	148	13383
——— D Geer's chronology confirmed by radioactive carbon, C^{14}	148	13382
Dehlinger, Peter. Shear-wave vibrational directions and related fault movements in Southern California earthquakes	150	13857
Denisse, J. F. The relation between geomagnetic activity and radioelectric solar activity	150	13832
Denisse, J. F., Steinberg, J. L., and Zisler, Siegfried. Influence on geomagnetic activity of sunspots distinguished by their radioelectric properties	149	13571
Denson, M. E., Jr. Longitudinal waves through the earth's core	150	13855
Dessauer, F. Microvariations of barometric pressure	149	13626

	No.	Abstract
de Terra, Helmut. Radiocarbon age measurements and fossil man in Mexico	148	13381
Deutscher Verein von Gas- und Wasserfachmannern. Exploration for water	150	13949
de Witte, Leendert. Relations between resistivities and fluid contents of porous rocks	149	13755
——— Simplified departure curves in resistivity logging	149	13756
Di Filippo, Domenico, and Marcelli, L. Travel times of *P** waves and the thickness of granitic layer in central Italy	149	13607
DiGiovanni, H. J. *See* LeVine, H. D.		
Dix, C. H. Seismic prospecting for oil	151	14102
Dixey, Frank. A practical handbook of water supply	150	13919
Doll, H. G. Differential coil system for induction logging, U. S. patent	148	13538
——— Electromagnetic well logging system, U. S. patent	148	13537
——— The Laterolog: A new resistivity logging method with electrodes using an automatic focusing system	149	13750
——— The MicroLog—A new electrical logging method for detailed determination of permeable beds	150	13968
——— The *SP* log in shaly sand	150	13971
Doll, H. G., and Martin, Maurice. Electrical logging in limestone fields	149	13759
Donn, W. L. An investigation of swell and microseisms from the hurricane of September 13–16, 1946	150	13877
Doolittle, W. W. Marine seismic surveying, U. S. patent	151	14148
Douglass, G. V. Recent ideas on mountain-building	148	13415
Dozy, J. J. Some notes on the volcanoes of Guatemala	148	13398
Duclaux, Françoise, and Martin, Jean. Contribution to the establishment of the bases of an African gravimetric network	148	13304
Due Rojo, Antonio. Seismological notes for 1951	151	14061
Duvall, W. I. *See* Obert, Leonard.		

E

Eardley, A. J. Tectonic divisions of North America	149	13678
Eckhardt, E. A. Geophysical activity in 1951	150	13908
Egyed, László. Some remarks concerning isostasy	149	13549
Einarsson, Trausti. A study of the earliest photographs of the eruption	149	13648
——— Studies of the mechanism of explosive activity in the Hekla eruption	149	13653
——— The basic mechanism of volcanic eruptions and the ultimate causes of volcanism	149	13652
——— The flowing lava. Studies of its main physical and chemical properties	149	13651
——— The rate of production of material during the eruption	149	13650
Einarsson, Trausti, Sigurgeirsson, Thorbjörn, and Bödvarsson, Gunnar. A report on the French-Icelandic gravity measurements in southern Iceland in 1950	148	13297
Eisler, J. D. Pendulum damping device for elevation meters, U. S. patent	151	14182
——— Studies of a surface seismic disturbance	150	13939
——— Vibrator detector, U. S. patent	149	13779
Elkins, T. A. The effect of random errors in gravity data on second derivative values	148	13432
Enslin, J. F. Geophysical methods of tracing and determining contacts of dolerite dykes in Karroo sediments in connection with the siting of boreholes for water	149	13739
Epinat'eva. *See* Yepinat'yeva.		
Ergin, Kazim. Energy ratio of the seismic waves reflected and refracted at a rock-water boundary	151	14045
——— Observations on recorded ground motion due to *P*, *PcP*, *S*, and *ScS*	151	14042
Ericson, D. B. *See* Kulp, J. L.		
Escher, B. G. Relation between the mechanism of the formation of fault troughs and volcanic activity	150	13904
Espinosa de los Monteros, J. M., and Lozano Calvo, Luis. The network of gravimetric observations in the Provincia de Huelva	148	13301
Evison, F. F. An electromechanical source of elastic waves in the ground	148	13462
——— A new approach to the study of elastic propagation in rocks	148	13463
——— The inadequacy of the standard seismic techniques for shallow surveying	151	14118

	No.	Abstract
Ewing, Maurice, and Press, Frank. Crustal structure and surface wave dispersion. Pt. 2: Solomon Islands earthquake of July 29, 1950	151	14044
Ewing, Maurice, Press, Frank, and Worzel, J. L. Further study of the *T*-phase	148	13333
See also Benioff, Hugo, Officer, C. B., Jr., Press, Frank *and* Worzel, J. L.		

F

Fairstein, Edward. *See* Borkowski, C. J.		
Favre, B. Geophysical methods of exploration for petroleum	149	13684
Fay, C. H., and Tvedt, T. J. Seismograph amplifier control, U. S. patent	149	13787
Fearon, R. E., and Mardock. E. S. The quantitative interpretation of radioactivity logs	149	13768
See also Thayer, J. M.		
Feely, H. W. *See* Kulp, J. L.		
Ferraro, V. C. A., and Unthank, H. W. Sudden commencements and sudden impulses in geomagnetism	149	13573
Ferraro, V. C. A., Parkinson, W. C., and Unthank, H. W. Sudden commencements and sudden impulses in geomagnetism; their hourly frequency at Cheltenham (Md.), Tucson, San Juan, Honolulu, Huancayo, and Watheroo	148	13313
Ferrer, Arturo, Serra, Nicolas, Holmer, Ralph, and Taylor, E. F. History and status of petroleum exploration in Uruguay	149	13687
Finch, R. H. The December 1950 subsidence at Kilauea	148	13402
Finn, R. S. Method and apparatus for seismic prospecting, U. S. patent	149	13785
Fisher, J. L. Liquid damped galvanometer, U. S. patent	149	13802
Fitch, A. A., and Lloyd, E. H. The precision of travel-time curves in the seismic method of geophysical surveying	149	13716
Fleming, C. A., and Reed, J. J. Mernoo Bank, East of Canterbury, New Zealand	149	13707
Fleming, E. H., Jr., Ghiorso, A., and Cunningham, B. B. The specific alpha-activity of U^{235}	148	13371
Flesch, L. *See* Hée, Arlette.		
Fontseré, Eduardo. The earthquakes of Catalonia, 1948–1949	148	13353
Ford, R. D. Micrologging	149	13747
Forsythe, R. L. *See* Tixier, M. P.		
Förtsch, Otto. *See* Reich, Hermann.		
Foster, P. H. Continuous line seismometer, U. S. patent	148	13518
Fourmarier, Paul. Vertical and tangential forces in the development of the crust of the earth	150	13900
Fourmarier, Paul, and Charlier, Charles. Earthquakes in Hainaut from 1900 to 1949	148	13350
Fournier d'Albe, E. M. and Lafargue, C. An ancient volcanic crater as a laboratory for the study of thermal radiation	150	13898
Franklin, E., and Loosemore, W. R. A survey equipment using low-voltage halogen-quenched Geiger-Müller counters	148	13484
See also Peirson, D. H.		
Fries, Carl, Jr., and Gutiérrez, Celedonio. Activity of Parícutin volcano from January 1 to June 30, 1951	148	13400
——— Activity of Parícutin volcano from July 1 to December 31, 1951	151	14073
Frowe, E. W. Magnetometer, U. S. patent	148	13514
Fryer, G. *See* Pringle, R. W.		
Fuchida, Takato. *See* Iida, Kumizi.		
Fullerton, P. W. *See* Sharpe, J. A.		

G

Gaibar Puertas, C. Remagnetization of the earth	149	13568
Galanopulos, A. G. The two destructive earthquakes of Larissa in the years 1892 and 1941	148	13358
Gallwitz, Hans. Geotectonic research and geotectonic hypotheses	150	13899
Gamburtsev, G. A. Deep seismic sounding of the earth's crust	150	13848
——— Zones where the arrival of refracted waves is kinematically possible in the case of the inversion of velocities in strata	148	13461

	No.	Abstract
Gane, P. G., Seligman, P., and Stephen, J. H. Focal depths of Witwatersrand tremors	151	14047
See also Willmore, P. L.		
García Gutiérrez, Luis. Geologic exploration in the mining industry	149	13685
García Siñeriz, José. Memoria General 1950	148	13430
——— The topographic correction in gravimetric investigations	151	14008
Garland, G. D. Comparison of gravitational and magnetic anomalies over certain structures in southwestern Ontario	148	13296
Garrigue, Hubert. Research on radioactivity at the summit of Puy de Dôme	148	13388
——— Research on the radioactivity of free air	149	13638
Gaskell, T. F., and Swallow, J. C. Seismic refraction experiments in the North Atlantic	148	13338
Gassmann, Fritz. Attenuation of elastic waves by reflected radiation and damped oscillations of bars	148	13421
——— Elastic waves in a spherical packing	149	13595
——— Graphical evaluation of the anomalies of gravity and of the magnetic field, caused by three-dimensional bodies	149	13695
——— On mechanical receivers of seismographs and vibrometers	149	13597
——— On the elasticity of porous media	150	13846
Gassmann, Fritz, and Weber, Max. Vibrometer with electronically adjustable constants	149	13596
Gayskiy, V. N. Determination of the thickness of the earth's crust in the vicinity of the observatory from seismograms of distant earthquakes	149	13603
Gees, R. H. Recent investigations by the seismic refraction method of salt domes of flat and steep shapes in northwestern Germany	149	13725
——— The development of geophysical methods of exploration in Germany since 1945	149	13689
Gel'fand, I. S. Approximate method of determining the boundary effect due to a buried charged body	151	14132
——— Direct methods of interpretation of gravitational and magnetic anomalies produced by three-dimensional bodies	151	14092
Germain-Jones, D. T. Seismic surveys over asymmetrical structures in southwest Persia	149	13727
Gerrard, J. A. F., Perutz, M. F., and Roch, A. Measurement of the velocity distribution along a vertical line through a glacier	151	14083
Gerth, H. Antilles-Moluccas, two island arcs; a comparison of their geologic structure and gravity anomalies	149	13558
Ghiorso, A. *See* Fleming, E. H., Jr.		
Giacomo, P. On the rapid oscillations of the geomagnetic field	149	13569
Gibault, G. Rapid variations of the earth's magnetic field	150	13831
See also Beaufils, Yvonne.		
Giorgi, Maurizio, and Rosini, E. On the origin of microseisms in the Mediterranean	149	13624
Glangeaud, Louis, and Lagrula, Jean. Correlations between gravimetric and structural data in the northern part of the province of Alger	151	14014
Glenn, A. H., and James R. W. Use of the wave height operational index in planning offshore gravity meter surveys	151	14094
Glennie, E. A. Density and geological corrections to gravity anomalies for the Deccan trap area in India	148	13306
Gloden, Albert. An altimetric survey in the Grand Duchy of Luxembourg in 1949	151	14013
——— Determination of gravity anomalies in the Grand Duchy of Luxembourg	151	14012
Goble, R. W. Method and apparatus for measuring the cross sectional area of well bores by supersonic waves, U. S. patent	149	13799
Godwin, Harry. Comments on radiocarbon dating for samples from the British Isles	149	13643
Goguel, Jean. The structure of the African rifts and gravimetry	149	13562
Gold Coast Geological Survey Department. Report for the financial year 1950–51	150	13914
Gougenheim, A. *See* Bollo, Robert.		
Gough, D. I. A new instrument for seismic exploration at very short ranges	149	13710
See also Hales, A. L.		

	No.	Abstract
Grabovskiĭ. *See* Grabovskiy.		
Grabovskiy, M. A. Magnetic properties of ferrites and their significance in geophysics	151	14022
Grant, F. S. Three dimensional interpretation of gravitational anomalies	149	13694
	151	14091
Green, R. P. Method of seismic surveying, U. S. patent	149	13782
Greer, W. J. *See* Owen, J. E., *and* Topper, Wilfred.		
Griffiths, J. C. Directional permeability and dimensional orientation in Bradford sand	148	13497
——— Grain-size distribution and reservoir rock characteristics	149	13763
Grigor'yev, S. Ye. Rock bursts in the mines of Kizel basin	150	13880
Groenendyke, G. M. Seismic prospecting system. U. S. patent	148	13528
Grütjen, Karl. Geostratimeter measurements in the Rhine lignite and the significance of the impulses of the Geostratimeter for potential new fields	150	13952
Gubin, I. E. *See* Gubin, I. Ye.		
Gubin, I. Ye. Earthquakes in Garmskaya Oblast'	151	14057
——— Predicting of the sites of occurrence of earthquakes from seismic and geologic data	150	13849
——— Seismotectonic method of seismic zoning	151	14053
Gulatee, B. L. Survey of India	149	13565
Gutenberg, Beno. Observations and theory of microseisms	148	13367
——— SV and SH	150	13856
——— Waves from blasts recorded in Southern California	150	13851
See also Benioff, Hugo.		
Gutiérrez, Celedonio. *See* Fries, Carl, Jr.		
Guyod, Hubert. Principles of MicroLog interpretation	148	13493
——— The shielded-electrode method	148	13492

H

Haalck, Hans. Complete determination of local gravitational disturbing fields by measurements with torsion balance, with numerical example	150	13806
——— Concerning the explanation of the magnetic field of the earth's core and the universal magnetism of celestial bodies	148	13307
——— On the causes of the magnetic field of the crust of the earth	150	13829
——— On the most advantageous use of the Eötvos torsion balance and of the analysis of its measurements	148	13431
——— The physical law of the development of the figure of the earth	150	13803
Habberjam, G. M., and Whetton, J. T. On the relationship between seismic amplitude and charge of explosive fired in routine blasting operations	148	13465
Haenny, Charles. *See* Binggeli, Edmond.		
Hagiwara, Takahiro; Rikitake, Tsuneji; and Yamada, Juhei. Observations of the deformation of the Earth's surface at Aburatsubo, Miura Peninsula	149	13670
Hagiwara, Takahiro; Rikitake, Tsuneji; Kasahara, Keichi; and Yamada, Juhei. Observations of the deformation of the Earth's surface at Aburatsubo, Miura Peninsula, Pt. 2	149	13671
——— Observations of the deformation of the Earth's surface at Aburatsubo, Miura Peninsula, Pt. 3	149	13672
Hagiwara, Takahiro; Kasahara, Keichi; Yamada, Juhei; and Saito, Sadao. Observation of the deformation of the Earth's surface at Aburatsubo, Miura Peninsula, Pt. 4	149	13673
Haill, H. K. *See* Heinrich, R. R.		
Hales, A. L., and Gough, D. I. Measurements of gravity in Southern Africa	149	13563
See also Willmore, P. L.		
Hamilton, R. G. Common fallacies in electric log interpretation	149	13751
——— Log analyzer simplifies electric log quantitative calculations	148	13501
Hammer, Sigmund. Geophysical exploration comes of age	150	13907
Handley, E. J. Control of variables in the observation of seismic echoes	150	13935
——— Geophysical exploration in Williston basin	148	13458
Harper, J. L. Magnetometer surveys in New Mexico areas	150	13928
Harris, Sidon. Current trends in seismic exploration	148	13455
Haskell, N. A. A note on air-coupled surface waves	149	13594

	No.	Abstract
Hastings, J. M. *See* Katcoff, S.		
Hattori, Yasumasa. Continuous variation of velocity with depth and distance	149	13609
See also Iida, Kumizi.		
Havemann, Hans. The earth's face determined by the core	151	14079
Hawes, Julian. A magnetic study of the Spavinaw granite area, Oklahoma	148	13447
Hawkins, J. E. Seismic signal amplifying system, U. S. patent	150	13990
——— System for analyzing seismographic records, U. S. patent	150	13985
Hayakawa, Masami. Investigation of the time variation of seismic wave velocity	149	13608
——— Magnetic survey in Tenmabayashi District, Aomori Prefecture	148	13441
——— Some problem of seismic exploration	151	14107
See also Iida, Kumizi.		
Hayes, R. C. Earthquake origins in New Zealand during the year 1949	150	13868
——— Earthquake origins in New Zealand during the year 1950	150	13869
——— The Cook Strait earthquakes: 1950 Jan.–Feb	150	13870
——— Wave period in New Zealand local earthquakes	150	13860
Heaps, S. N. *See* Simon, R. F.		
Heck, N. H. *See* Wood, H. O.		
Hée, Arlette, and Lecolazet, René. Use of drill holes in rocks for the study of penetrating radiation	151	14141
Hée, Arlette, Kleiber, J., Flesch, L., and Jarovoy, Michel. Radioactive centers and magnetization of two rocks	150	13886
Heiland, C. A., and Murray, M. T. Method for geophysical exploration, U. S. patent	149	13788
Heinrich, R. R., and Haill, H. K. On the recorded motion of the *S* phase at Florissant	150	13858
Heiskanen, W. On Seattle earthquakes and gravity anomalies	148	13348
Helms, Hans von. Recent seismic refraction investigations of flat and steep salt domes in northwestern Germany	148	13470
——— Refraction seismic surveys of salt domes in the Hamburger Loch	150	13943
See also Brinckmeier, G.		
Helwich, B. *See* Krey, Theodor.		
Hendricks, C. E. Galvanometer with adjustable damping, U. S. patent	151	14183
Herd, H. H. *See* Beckman, A. O.		
Herman, R. C. *See* Alpher, R. A.		
Herndon, H. V., and Hoff, R. G. Portable radiation survey instrument, U. S. patent	150	13995
Hersey, J. B., Officer, C. B., Jr., Johnson, H. R., and Bergstrom, S. Seismic refraction observations north of the Brownson Deep	151	14048
Herzog, Gerhard. Geophysical exploration, U. S. patent	148	13533
——— Locating casing collars in a well, U. S. patent	148	13536
See also Lee, B. D.		
Hess, V. F., and O'Donnell, G. A. On the rate of ion formation at ground level and at one meter above ground	148	13387
Hess, V. F., Burns, W. F., and Parkinson, W. D. Gamma radiation from uranium X_2	151	14062
Heyll, Hellmuth. Exploration with the Geoskop and Geostratimeter in the lignite basin of the Rhine	150	13953
Higasinaka, Hideo. A new gravity formula for the Far East	149	13566
Hildebrandt, A. B. Inclinometer for boreholes, U. S. patent	151	14174
Hill, M. N. Seismic refraction shooting in an area of the eastern Atlantic	151	14049
Hiller, Wilhelm. The results of geophysical investigations in southwestern Germany with special consideration of earthquakes	148	13349
Hinspater, E. W. *See* Rose, J. E.		
Hirayama, Misao. External field of geomagnetism	148	13308
Hirvonen, R. A. Gravity anomalies and deflection of the vertical above sea level	151	14006
Hoff, R. G. *See* Herndon, H. V.		
Hogg, G. A. *See* Wyllie, M. R. J.		
Holland, H. D. *See* Kulp, J. L.		
Holmer, Ralph. *See* Ferrer, Arturo.		
Homer, T. R. Electrical logging in well bores, U. S. patent	151	14179

	No.	Abstract
Homma, S. Initial value problem in the theory of elastic waves	150	13842
——— On boundary shear waves at an inner zone with continuously varying properties and related problems for surface waves	150	13841
Homma, S., and Seki, A. A relation between the area of after shock region and the radius of sensibility circle (continued)	148	13345
Horsley, C. B. *See* Seavey, G. C.		
Hospers, J. Reinterpretation of a gravity survey in central northern Iceland	151	14011
——— Remanent magnetism of rocks and the history of geomagnetic field	151	14025
Houghton, H. M. Five years of geophysics in western Canada	149	13686
——— Geophysical exploration in western Canada	150	13909
Howard, R. C., and Winn, R. H. Guarded electrode system improved log interpretation of Lower Wilcox	150	13969
Howell, B. F., Jr., and Aiken, R. W. Determination of radial permeability variations by electrical measurements	148	13498
Howell, B. F., Jr., Licastro, P. H., and Schwendinger, W. W. An empirical correlation between rock resistivity and porosity for the Bradford sand	148	13495
Holyman, H. W. Evaluation of magnetics in the Delaware Basin	148	13445
Huber, A. Geoelectric deep sounding in valleys	149	13732
Hudson, B. E., Jr. *See* Smith, P. V., Jr.		
Hughes, D. S., and Kelly, J. L. Variation of elastic wave velocity with saturation in sandstone	151	14117
Hughes, D. S., and Stanbrough, J. H. Transmission of elastic pulses in rods	148	13422
Hultqvist, Bengt. Calculation of the ionization due to radioactive substances in the ground	150	13882
Hurley, P. M. Alpha ionization damage as a cause of low helium ratios	149	13632
Hurley, P. M., and Shorey, R. R. Discrimination of thoron activity in presence of radon	151	14063

I

Ichimura, Takeshi; Morimoto, Ryōhei; and Tsuya, Hiromichi. A brief note on the recent explosive activity of Volcano Yakeyama	149	13658
Ichinohe, Tokio. Highly sensitive double bifilar gravimeter	148	13292
Iida, Kumizi, and Kurihara, Shigetoshi. Offshore seismic exploration in Ube coal field	151	14125
Iida, Kumizi; Fuchida, Takato; Hayakawa, Masami; Hattori, Yasumasa; Kaneko, Tetsuichi; and Omote, Syun'itiro. Compilation of coal seismic exploration data in Japan	148	13471
Imamura, Gakuro. Maximum gradients of crustal deformations at the time of a destructive earthquake	151	14051
Imbò, G. Considerations of the present activity of Vesuvius	148	13409
——— Fundamental feature of the annual variations of the inclination of the ground around the Vesuvian observatory	148	13408
——— Importance of the determinations of the temperatures of solidification of lava	148	13406
——— Recent manifestations of eruptive activity of Vesuvius	148	13407
Imbò, G., and Casertano, Lorenzo. Evaluation of the uranium and thorium content of radioactive substances by the photographic method	150	13885
——— Statistical distribution of alpha particles recorded on a photographic plate as a function of the projection of the depth of penetration into the emulsion	150	13884
Ingalls, P. C. Sand bar located by seismograph	149	13722
Ippolito, Felice. On the radioactivity of the lava from the summit of Vesuvius	150	13883
Ivanov, A. G. Impulsive perturbations of telluric currents	148	13325
Iun'kov. *See* Yun'kov.		

J

Jackson, J. S. Density of Irish rocks	149	13567
Jakosky, J. J. Gravity meter, U. S. patent	151	14142
Jakosky, J. Jay, and Jakosky, John J., Jr. Frequency analysis of seismic waves	151	14116
Jakosky, John J., Jr. See Jakosky, J. Jay.		
James, R. W. *See* Glenn, A. H.		

	No.	Abstract
Jankovič, Slobodan. The magnetite deposit at Suvo Rudiste, Kopaonik	149	13702
Jardetzky, W. S., and Press, Frank. Rayleigh-wave coupling to atmospheric compression waves	150	13844
Jarman, C. A. *See* Brewer, A. W.		
Jarovoy, Michel. *See* Hée, Arlette.		
Jeffreys, Harold. Origin of the earth	149	13679
——— Problems of thermal instability in a sphere	150	13889
——— The earth (3d ed)	151	14074
——— The free-air reduction of gravity to the second order	150	13807
Jenny, W. P. Aerial magnetic oil discoveries	148	13446
——— Structural correlation of micromagnetic and reflection surveys	150	13925
Jensen, Homer. Aeromagnetic survey helps find new Pennsylvania iron ore body	149	13704
——— Method and apparatus for magnetic explorations, U. S. patent	149	13776
	150	13982
See also Klaasse, J. M., and Rumbaugh, L. H.		
Jobert, G. Terrestrial tides in a heterogeneous fluid globe	150	13808
Johnson, A. M. and Wesley, R. H. Applications of seismic methods to foundation exploration	151	14103
Johnson, Frederick, ed. Radiocarbon dating	140	13378
Johnson, H. R. *See* Hersey, J. B.		
Johnston, H. F. List of geomagnetic observatories and thesaurus of values	148	13814
Jones, L. First results of the comparison of the Second General Leveling Survey (1948) with previous surveys	149	13559
See also Charlier, Charles.		
Jones, P. J. Electric log resistivity, porosity and water saturation for clean and shaly sandstones	149	13762
Júdice, António. On the use of anomalies of Prey for the determination of the figure of the earth	150	13804
Jung, Karl. Numerical treatment of isostasy according to Airy developing the square of the altitudes into spherical functions	148	13289

K

Kalashnikov, A. G., and Kapitsa, S. P. Magnetic susceptibility of rocks under elastic stresses	151	14024
Kalinin, Yu. D. *See* Afanas'yeva, V. I.		
Kanai, Kiyoshi. The effect of solid viscosity of surface layer on the earthquake movements	150	13845
——— The result of observation of wave-velocity in the ground	150	13853
Kaneko, Jun. Electrical and magnetic prospecting on the Sankyo iron mine, Niigata Prefecture	151	14135
Kaneko, Tetsuichi. *See* Iida, Kumizi.		
Kántás, Karl *See* Scheffer, Viktor.		
Kapitsa, S. P. *See* Kalashnikov, A. G.		
Karelina, N. A. *See* Turlygin, S. Ya.		
Kasahara, Keichi. *See* Hagiwara, Takahiro.		
Kashpur, Ya. N. Geothermal features of the Carboniferous deposits of the southwestern part of the Donets Basin	151	14071
Katcoff, S., Schaeffer, O. A., and Hastings, J. M. Half-life of I^{129} and the age of the elements	148	13373
Kaufman, Sidney, and Roever, W. C. Laboratory studies of transient elastic waves	149	13600
Kawasumi, Hirosi. Measures of earthquake danger and expectancy of maximum intensity throughout Japan as inferred from the seismic activity in historical times	149	13622
Keilis-Borok. *See* Keylis-Borok.		
Keller, G. V. Modified mono-electrodes for improved resistivity logging	148	13491
Keller, G. V., and Licastro, P. H. A progress report on the interpretation of differential resistivity logs	148	13494
Kelly, J. L. *See* Hughes, D. S.		
Kelly, S. F. Geological and geophysical approach to mining problems	150	13917
Kendall, J. M. Underwater microphone. U. S. patent	148	13522

	No.	Abstract
Keylis-Borok, V. I. Frequency equation of a multilayer elastic medium	151	14032
——— Graphic methods of determination of the dynamic parameters of the focus of an earthquake	148	13330
——— On the question of studying (seismic) sources equivalent to the foci of earthquakes	151	14035
Surface waves generated in a layer spread over an elastic semispace	148	13329
Kingdon-Ward, F. Caught in the Assam-Tibet earthquake	148	13364
Kirillova, I. V. Seismicity of the Akhalkalaki plateau	151	14059
See also Belousov, V. V.		
Kishinouye, Fuyuhiko. On the period and the amplitude of microseismic movement	150	13876
——— Time distribution of felt aftershocks of the Imaichi earthquake of December 26, 1949	150	13872
See also Rikitake, Tsuneji.		
Kiyono, Takeshi. The apparent resistivity in a drift	148	13480
Kizawa, T. Geophysical phenomena accompanied by volcanic actions	151	14072
Kjartansson, Gudhmundur. Water and mud flows	149	13649
Kjellberg, G. *See* Arrhenius, G.		
Klaasse, J. M., and Jensen, Homer. Method and apparatus for conducting geophysical surveys from an aircraft, U. S. patent	150	13981
Kleiber, J. *See* Hée, Arlette.		
Klein, N. E. *See* Brattain, W. H.		
Klotz, J. A. Geophysical exploration methods	150	13918
Knopoff, L. On Rayleigh wave velocities	151	14041
Knowles, R. S. Cuba a challenge to wildcatters	150	13912
Kogbetliantz, E. G. System for measuring magnetic fields, U. S. patent	149	13774
Kohanowski, N. N. Geomagnetic survey of Rolette and Towner Counties, N. Dak	149	13701
Kohl, E. On the radioactivity of marine horizons in carbon	148	13385
Kokesh, F. P. The development of a new method of seismic velocity determination	150	13937
Kolbenheyer, T. Report on gravity investigations with the Nørgaard gravimeter TNK 379 in 1948–49	148	13294
Kondorskiy, Ye. I. The theory of the magnetic properties of rocks and powdered substances	151	14023
Koning, L. P. G. Earthquakes in relation to their geographical distribution, depth and magnitude	150	13861
——— Earthquakes in relation to their geographical distribution, depth, and magnitude, pt. 4, South America	151	14054
——— Earthquakes in relation to their geographical distribution, depth, and magnitude, pt. 5, Central America and the Caribbean area, and pt. 6, The Southern Antilles	151	14055
——— Earthquakes in relation to their geographical distribution, depth, and magnitude, pt. 7, The Pacific coast of North America and the Aleutian arc, and pt. 8, The Mediterranean region	151	14056
Korn, H., and Martin, Hans. The seismicity of South-West Africa	149	13618
Korneva, L. A. The east component of the geomagnetic field	148	13309
Koshikawa, Yoshiaki. Seismometrical study of the Imaichi earthquake on Dec. 26, 1949	150	13871
Krasnow, Shelley, and Curtiss, L. F. Method and apparatus for measuring radioactivity, U. S. patent	149	13795
——— Multiple element radioactive ray recording, U. S. patent	149	13796
Krasnow, Shelley, and Test, M. J. Construction of Geiger-Müller tube, U. S. patent	150	13996
Krayev, A. P. Principles of geoelectric methods of prospecting	149	13728
Krey, Theodor. Evaluation of interlocking recording in their application to seismic methods of prospecting	149	13712
——— The significance of diffraction in the investigation of faults	151	14120
Krey, Theodor, and Helwich, B. Reflections in the interior of salt domes and their importance in petroleum exploration	149	13719
Krouskij, L. An application of the "regula falsi" in seismic prospecting	151	14115
Krousky, L. The effect of errors in measurements on the determination of the dip and depth of a reflecting boundary	149	13718

	No.	Abstract
Krueger, W. F. Apparatus for determining the time of descent of instruments within boreholes, U. S. patent	149	13800
Kulikov, K. A. The displacement of the poles and the variation of latitudes	149	13666
Kulp, J. L. Age measurement in marine cores by Carbon 14	149	13640
——— The carbon-14 method of age determination	151	14065
Kulp, J. L., Holland, H. D., and Volchok, H. L. Scintillation alpha counting of rocks and minerals	148	13486
Kulp, J. L., Tyron, L. E., and Feely, H. W. Techniques of natural carbon-14 determination	149	13639
Kulp, J. L., Volchok, H. L., Holland, H. D., and Ericson, D. B. Thick source alpha activity of some North Atlantic cores	151	14066
Kunetz, Géza. Method for the electric prospection of the subsoil, U. S. patent	151	14164
See also Beaufils, Yvonne.		
Kurihara, Shigetoshi. *See* Iida, Kumizi.		

L

Lafargue, C. *See* Fournier d'Albe, E. M.		
Lagrula, Jean. *See* Glangeaud, Louis.		
Lahn, E. Seismic activity in Turkey from 1947 to 1949	150	13866
Lamoglie, Carlo. On the compensation of primary electromagnetic fields in induction measurements	148	13478
Lang, A. H. Uranium ore bodies. How can more be found in Canada	150	13958
Lazarenko, G. P. Magnetic pulsations in Keles	151	14020
Lecolazet, René. *See* Hée, Arlette.		
Lee, B. D., and Herzog, Gerhard. Seismic prospecting, U. S. patent	151	14157
Lee, C. S. Geophysical surveys on the Bahama Banks	148	13298
Lee, Frank W., and Tinder, B. M. Helicopters a versatile oil-field tool	148	13511
Lee, F. W. Method of geophysical prospecting, U. S. patent	151	14161
——— Temperature compensation magnetometer indicator, U. S. patent	151	14145
Leith, T. H. Heat flow at Kirland Lake	150	13892
LeVine, H. D., and Di Giovanni, H. J. Radiation detector and measuring means, U. S. patent	151	14169
Libby, W. F. *See* Arnold, J. R., *and* Arrhenius, G.		
Licastro, P. H. *See* Howell, B. F., Jr., *and* Keller, G. V.		
Lichtman, S. W. Radioactivity detector and discriminator, U. S. patent	148	13534
Linehan, Daniel. Seismology applied to shallow zone research	150	13942
Littlewood, C. A. Gravity measurements on the Barnes Icecap, Baffin Island	151	14010
Lloyd, E. H. *See* Fitch, A. A.		
Lombardi, L. V. *See* Allen, C. F., *and* Poulter, T. C.		
Long, A. B. Well logging apparatus, U. S. patent	149	13798
Longacre, W. A. The Hotchkiss Superdip as a vertical intensity magnetometer	149	13700
Loosemore, W. R. *See* Franklin, E.		
Lopez de Azcona, J. M. The problem of microseisms	149	13623
——— The problem of microseisms	150	13875
Lord, A. H., Jr. Prospecting using gamma ray detection, U. S. patent	151	14166
Love, S. K. Natural radioactivity of water	148	13386
Low, J. H. Magnetic prospecting methods in asbestos exploration	148	13439
Lozano Calvo, Luis. A method of correcting the national gravimetric network and its international ties by observations with a gravimeter	149	13551
——— The network of gravimetric observations in the province of Avila	148	13302
——— *See also* Espinosa de los Monteros, J. M.		
Luchak, George. A fundamental theory of the magnetism of massive rotating bodies	151	14016
Lundbak, Asger. Calculation of magnetic declination and horizontal intensity on the basis of the vertical intensity	148	13315
Lundberg, Hans. Airborne radioactivity surveys	149	13742
——— Radioactivity surveys aid prospecting for oil and gas	150	13961
Lundberg, Hans, Roulston, K. L., Pringle, R. W., and Brownell, G. M. Oil exploration with airborne scintillation counters	150	13960
Lynch, J. J. The Great Lakes, a source of two-second frontal microseisms	150	13878
Lytle, N. J., and Rieke, R. R. Well logging in the Spraberry	148	13505

M

	No.	Abstract
MacCarthy, G. R. Geothermal investigations on the Arctic slope of Alaska	150	13891
McClure, C. D. *See* Yost, W. J.		
McCollum, E. V. Quality of geophysical measurements	148	13433
McCrady, Edward. The use of lead isotope ratios in estimating the age of the earth	149	13633
MacDonald, G. A. Beginning of geomagnetic observations at Hawaiian Volcano Observatory	148	13401
——— The Kilauea earthquake of April 22, 1951, and its aftershocks	149	13610
Macdonald, G. A., and Wentworth, C. K. The Kona earthquake of August 21, 1951	149	13611
Macelwane, J. B. Practical application of microseisms to forecasting	148	13368
McGaha, S. W., and Terry, J. M. Lane-Wells correlation study; central Kansas area	149	13771
McKellar, I. C., and Collins, B. W. Self-potential logs of two Canterbury water wells	149	13766
McLaughlin, G. H. *See* Cartier, W. O.		
McLoad, K. W. Selector arrangement for seismic prospecting system, U. S. patent	148	13529
MacMillan, J. K. Geophysical operations in the Canadian bush	148	13428
Macune, C. W. *See* Basham, R. B.		
Malno, Armando. The calibration of the Kew No. 177 magnetometer	150	13828
Małkowski, Zdzislaw. Electric resistivity method with direct current in geophysical explorations	150	13947
Malone, A. B. A nomogram for the computation of tidal deviations of the vertical	150	13811
Malovichko, A. K. Method of analytic continuation of gravitational anomalies	150	13812
——— On the averaging of anomalous fields	148	13290
Manfredini, Antonio. Hydrological research with geophysical methods in Guidonia	149	13740
See also Zaccara, Gaetano.		
Mann, R. W. Seismic exploration method, U. S. patent	150	13984
Maple, E. *See* Singer, S. F.		
Marcelli, L. *See* Di Filippo, Domenico.		
Mardock, E. S., and Myers, J. P. Radioactivity logs define lithology in the Spraberry formation	148	13506
See also Bush, R. E., *and* Fearon, R. E.		
Marin y Bertran de Lis, Agustin. A visit to oil fields of western Germany	149	13690
Marliere, René. The earthquake of April–May 1949 in the vicinity of Mons	148	13351
Martel Sangil, Manuel. The genesis of the Canary Islands	149	13661
Martin, G. P. M. Volcanic activity is not a climate forming factor	150	13894
Martin, Hans. *See* Korn, H.		
Martin, Jean. *See* Duclaux, Françoise.		
Martin, Maurice. *See* Decker, G. J., *and* Doll, H. G.		
Massoni, P. H. *See* Winsauer, W. O.		
Mathews, H. A., Riordan, M. B., and Scott L. B. Sound indicator and fluid level indicator for wells, U. S. patent	151	14175
Matschinski, Mathias. Average elevation of continents and geodynamic forces	148	13419
——— Linear density of volcanoes in the volcanic arc and the curvature of that arc	148	13396
——— Numerical data on the distribution of volcanoes bordering the Pacific Ocean	148	13395
Matsumae, Shigeo. Magnetostriction in weak magnetic field	148	13316
Mayes, F. M., and Tickner, A. J. Magnetometer gradiometer apparatus and method, U. S. patent	151	14147
Mayne, W. H. Seismic surveying, U. S. patent	149	13777
Meen, V. Ben. Solving the riddle of Chubb Crater	148	13440
Mendez de Vigo, Alfonso. *See* Yrizar, Pedro de		
Menton, J. P. Filter for seismic prospecting, U. S. patent	148	13530
Menzel, Heinz. On the spectrum of seismic waves produced by explosions	149	13715
	150	13933

	No.	Abstract
Mercier, V. J. Simultaneous radiation logging in Kansas	148	13507
Merritt, J. W. Radioactive oil survey technique	150	13959
——— Surface mapping by gamma ray	149	13741
Migaux, Léon. Ten years of use of the telluric method	149	13733
Mihailovič, D. J. Seismic characteristics of the Litija region	148	13617
Mihailovič, Jelenko. Seismic activity of the Morava river valley	149	13360
——— Seismicity of the region of Lake Scutari	148	13361
——— Seismic regions of Macedonia	148	13359
——— Seismologic map of Yugoslavia	151	14060
Milne, W. G. Bibliography of seismology	148	13326
——— Bibliography of seismology	148	13327
——— Bibliography of seismology	148	13328
Minakami, Takeshi. Earthquakes at the state of paroxysmal eruption	149	13614
——— Earthquakes followed by the birth and development of the lava dome	149	13615
——— On the temperature and viscosity of the fresh lava extruded in the 1951 Oo-sima eruption	149	13659
See also Sakuma, Shūzō.		
Minton, J. P. Seismic prospecting, U. S. patent	149	13784
Means, J. W. Magnetic testing system, U. S. patent	151	14146
Mintrop, Lüdger. Economic and scientific significance of geophysical methods for the investigation of mountain structures and mineral deposits	150	13916
——— The stratification of the crust and mantle of the earth from seismic observations	151	14039
Miyabe, Naomi. Vertical earth movements in Japan as deduced from the results of rerunning the precise levels	150	13905
Miyamura, Setumi, and Akima, Tetuo. On the observation of aftershocks of the Imaichi earthquake near the village of Hunyu, Totigi-ken	150	13873
Modriniak, N. Magnetic studies of the proposed dam site at Atiamuri	148	13442
Molard, Pierre. *See* Coulomb, Jean.		
Monakhov, F. I. Some results of the analysis of earthquakes which occurred in the Garm region	150	13867
Monin, I. F. On studying the shape of the geoid by the gravimetric method	151	14007
Mooney, H. M. Magnetic susceptibility measurements in Minnesota. Pt. 1: Technique of measurement	151	14096
Moore, R. W. Earth-resistivity tests applied to subsurface reconnaissance surveys	151	14127
——— Geophysical methods adapted to highway engineering problems	150	13922
Morelli, Carlo. Calibration of two Worden gravimeters and the tying of European gravimetric networks	149	13552
——— Experimental gravimetric and magnetic exploration of the foreland of Colli Euganei	148	13435
——— First contribution to the fundamental gravimetric network of Italy	151	14009
——— Fundamental formulas of geodesy based on isogravitational surfaces	150	13805
Morgan, Frank. *See* Wyllie, M. R. J.		
Morgan, J. V. Correlation of radioactive logs of the Lansing and Kansas City groups in central Kansas	149	13772
Morimoto, Ryōhei. *See* Ichimura, Takeshi.		
Morris, George. Vibrations due to blasting and their effects on building structures	148	13472
Morris, T. S. Investigating ground water supplies with electric well logs	150	13967
Mossman, R. W. *See* Thralls, H. M.		
Mounce, W. D. Method and apparatus for underwater gravity surveying, U. S. patent	149	13773
Muffly, Gary. Detecting device, U. S. patent	150	13992
Mungal, A. G. *See* Clark, A. R.		
Munuera, J. M. *See* Yrizar, Pedro de.		
Murozumi, Masayoshi. Contribution to the electrical prospecting in Shojingawa sulphur mine and Amemasugawa sulphur mine, Hokkaido	151	14136
Murphy, L. M., and Ulrich, F. P. United States earthquakes 1950	150	13863
Murphy, Thomas. Provisional values for magnetic declination in Ireland for the epoch 1950.5	150	13836
Murray, M. T. *See* Heiland, C. A.		
Myers, J. P. *See* Mardock, E. S., *and* Whetton, J. T.		

N

	No.	Abstract
Nadai, A. L. Stress and strain in the outer solid shell of the earth	149	13665
Nagata, Takeshi. Reverse thermo-remanent magnetism	151	14026
——— Sudden commencements preceded by the preliminary reverse impulse in a geomagnetic field	149	13574
Nagata, Takeshi, Akimoto, Syuniti, and Uyeda, Selya. Reverse thermo-remanent magnetism	151	14028
Nakamura, S. T., and Sima, Hiromu. A method of deduction of pressure distribution on an internal plane surface from the observed topographical change (Pt. I)	148	13285
Nakano, T. Relation between damages by earthquakes and topography	149	13620
Narayanan, S. Y. *See* Pramanik, S. K.		
Nasu, Nobuji. Block movement along the seismic fault	150	13906
Nawijn, A. The heat balance of the earth's crust	148	13390
Nedeljković, R. L. Seismic characteristics of the region of Knin	148	13363
Néel, Louis. Experimental confirmation of a mechanism of the reversal of thermo-remanent magnetization	151	14027
——— The inversion of the permanent magnetization of rocks	148	13319
——— Theory of magnetic creep of fine-grained magnetic substances with applications to terra cotta	148	13318
Nepomnyashchikh, A. A. Logarithmic master charts for gravitational surveys	149	13696
Nerenst, Poul. *See* Anderson, Johannes.		
Nettleton, L. L. Gravity operations in water covered areas	148	13434
——— Sedimentary volumes in Gulf Coastal Plain of United States and Mexico, pt. 6, Geophysical aspects	151	14090
Neufeld, Jacob. Radiation detector, U. S. patent	150	13994
Neumann, Frank. Principles underlying the interpretation of seismograms	150	13850
Niblett, E. R. *See* Bullard, E. C.		
Nichols, C. R. Electrical prospecting, U. S. patent	151	14163
Niles, J. A., Simpson, N. B., Sturgis, H. F., Vincent, R. P., and Ziemer, C. W. Apparatus for measuring well characteristics, U. S. patent	148	13544
Nishitake, Teruo. On the discontinuities of the earth mantle	148	13427
Niskanen, Erkki. *See* Tanni, L. I.		
Nodya, M. F. A new kind of platform for measuring the vertical gradient of anomalous magnetic fields with a magnetic field balance	151	14097
Nomura, Yūkichi. On the diffraction of electric waves by a perfectly reflecting wedge	149	13729
Nordquist, J. M. *See* Richter, C. F.		
Norin, Rolf. Radioactivity and rhythm of sedimentation	149	13636
Normandin, A. The Assam earthquakes in 1950 and their hydrologic effects	150	13874
Nuttli, O. W. The western Washington earthquake of April 13, 1949	148	13335
Nye, J. F. The flow of glaciers and ice-sheets as a problem in plasticity	148	13418

O

Obert, Leonard, and Duvall, W. I. Generation and propagation of strain waves in rock	149	13599
Ochiai, Toshiro. Radioactive exploration on the faults	148	13487
O'Dea, P. L. *See* Walker, G. B.		
O'Donnell, G. A. *See* Hess, V. F.		
Officer, C. B., Jr. On the existence of Uller's waves	148	13331
Officer, C. B., Jr., Ewing, Maurice, and Wuenschel, P. C. Seismic refraction measurements in the Atlantic Ocean, Pt. IV; Bermuda, Bermuda Rise, and Nares Basin	150	13852
See also Hersey, J. B.		
Oil Progress. "Full Fathom Five"	148	13512
Okuda, Toyozo. On the change of local geoid in the southwestern part of Japan	149	13554
Olczak, Tadeusz. Gravimetric map of Poland	149	13561
——— Gravity force in Poland	148	13303
Oliver, Jack. *See* Crary, A. P.		
Omote, Syun' itiro. *See* Iida, Kumizi.		
Oppenheim, Victor. The structure of Colombia	151	14080
——— The structure of Ecuador	148	13423

	No.	Abstract
Ording, J. R. Seismic exploration method, U. S. patent	151	14158
Ortiz de Villacian, J. R. Physicomathematical theory of the earth (contribution to geophysics)	150	13901
Oulianoff, Nicolas. Gravimetry in relation to geologic structures	150	13822
Owen, David. An apparatus for studying the laws of the magnetic field due to an electric current in a long straight conductor	149	13570
Owen, J. E. Electrical well logging apparatus, U. S. patent	150	14002
——— The resistivity of a fluid-filled porous body	150	13974
Owen, J. E., and Greer, W. J. The guard electrode logging system	149	13749

P

Page, C. N. *See* Daly, J. W.		
Parasnis, D. S. A study of rock densities in the English Midlands	150	13826
Pariyskiy, N. N. The effect of microseisms on the determination of gravity force by the pendulum method	148	13295
——— The vertical component of the attraction exercised by a hyperbolic dome	148	13288
Parkinson, W. C. *See* Ferraro, V. C. A.		
Parkinson, W. D. *See* Hess, V. F.		
Parr, J. O., Jr. Seismic surveying U. S. patent	148	13525
——— Seismic surveying, U. S. patent	149	13778
Pasechnik, I. P. Comparison of the results of a theoretical study of reasonance phenomena in the system ground-seismograph with experimental data	151	14106
——— Experimental methods studying reasonance phenomena in the system ground-seismograph	150	13934
——— Results of experimental investigation of reasonance phenomena in the vibrating system ground-seismograph	151	14105
Patnode, H. W. Method of determining formation factor of irregular rock samples. U. S. patent	148	13545
Pearson, J. M. Electrical logging method and apparatus. U. S. patent	148	13543
Peirson, D. H., and Franklin, E. Aerial prospecting for radioactive minerals	148	13489
Peltz, Walter. The fourth geophysical conference of the German Coal Mining Board, Brown coal group	150	13923
Peña, Vicente. *See* Yrizar, Pedro de		
Penta, F., and Conforto, B. The results of exploratory drilling in Campi Flegrei region and of prospecting for vapor, thermal water, and endogenous forces	148	13393
Perry, E. G., Jr. Method and apparatus for recording vibrational data. U. S. patent	148	13521
Persch, Fritz. The determination of the water table from the Schlumberger diagram	149	13765
Perutz, M. F. *See* Gerrard, J. A. F.		
Peterson, Glen. Electrostatic seismometer, U. S. patent	149	13786
Picciotto, E. E. Distribution of radioactivity in eruptive rocks	149	13635
——— Radioactive phenomena in geology	149	13629
Piety, R. G. Method for determining the direction of arrival of waves, U. S. patent	151	14149
Piety, R. G., and Thomas, M. E. Seismometer, U. S. patent	149	13781
Pirson, S. J. Review of quantitative methods of electrical-log interpretation	150	13966
See also Wright, T. R.		
Pletta, D. H. *See* Szebehely, V. G.		
Pollard, T. A., and Reichertz, P. P. Core analyses practices—Basic methods and new developments	149	13746
Ponte, Gaetano. Summary of the principal observations and research on Mount Etna	149	13657
Pottorf, Newell. Marine seismometer spread, U. S. patent	150	13989
Poulter, T. C. Apparatus for seismic exploration, U. S. patent	151	14151
——— Seismic exploration, U. S. patent	151	14153
——— Seismic exploration employing elevated charges, U. S. patent	151	14152
	151	14154

	No.	Abstract
Poulter, T. C., and Lombardi, L. V. Multiple reflection on the Edwards Plateau	148	13467
Pramanik, S. K., and Narayanan, S. Y. Diurnal magnetic variation in equatorial regions	151	14018
Press, Frank and Ewing, Maurice. Magnetic anomalies over oceanic structures	150	13837
——— Two slow surface waves across North America	151	14043
See also Benioff, Hugo, Ewing, Maurice, *and* Jardetzky, W. S.		
Price, A. T., and Wilkins, G. A. The daily magnetic variations in equatorial regions	148	13312
Pringle, R. W., Standil, S., Taylor, H. W., and Fryer, G. A further study of the natural activity of lanthanum	148	13372
See also Lundberg, Hans.		
Pritchett, W. C. Attenuation of radio-frequency waves through the earth	149	13735
Purbrick, R. L., Cherry, L. T., and Carpenter, J. F. The design of thin-windowed Geiger-Müller counters	148	13485
Purcell, W. R. Method and apparatus for measuring capillary pressure, U. S. patent	150	14001
Puzin, L. A. Connate water resistivity in Oklahoma—Its application to electric log interpretation	150	13973

Q

Quiring, H. L. Ejection and the 3rd law of Kepler. Kinematics and energetics of the ejection of the moon	149	13664

R

Reed, J. J. *See* Fleming, C. A.		
Reich, Herman. Contribution of geophysics to geologic exploration	151	14084
——— Results of seismic investigations in the Peissenberg coal mine	151	14123
Reich, Hermann, Förtsch, Otto, and Schulze, G. A. Results of seismic observations in Germany on the Heligoland explosion of April 18, 1947	148	13341
Reichertz, P. P. *See* Pollard, T. A.		
Reid, A. C. Marine seismometer spread, U. S. patent	150	13986
Rey Pastor, Alfonso. Note on the Alicante submarine earthquake of June 9, 1947	148	13355
——— Seismic phenomena in Elche from August to November 1947	148	13354
——— The earthquake of Confrides (Alicante), of February 9, 1949	148	13357
——— The earthquake of June 23, 1948	148	13356
——— The seismic province of Caravaca	148	13352
Richardson, M. S. *See* Brattain, W. H.		
Richter, C. F., and Nordquist, J. M. Instrumental study of the Manix earthquakes	149	13606
Richter, N. Formation of moon craters on the earth	149	13660
Ricker, N. H. Distortionless seismic wave filter, U. S. patent	148	13527
——— The form and laws of propagation of seismic wavelets	149	13586
Rieke, R. R. *See* Lytle, N. J.		
Rikitake, Tsuneji. A method of studying the distribution of electrical currents in a spherical shell having non-uniform conductivity	148	13324
——— A miniature earth-inductor	148	13437
——— Changes in earth current and their relation to the electrical state of the earth's crust	148	13323
——— Changes in magnetic dip that accompanied the activities of Volcano Mihara (second report)	148	13412
——— Diffraction of electromagnetic waves around the crater of Volcano Mihara	148	13411
——— Electromagnetic shielding within the earth and geomagnetic secular variation	148	13310
——— On magnetization of volcanoes	149	13577
——— The distribution of magnetic dip in Ooshima (Oo-Sima) Island and its change that accompanied the eruption of Volcano Mihara,	148	13413
Rikitake, Tsuneji, and Kishinouye, Fuyuhiko. Electrical properties of soil at radio frequencies	149	13736
——— Electrical properties of soil at radio frequencies	150	13956

	No.	Abstract
Rikitake, Tsuneji. *See also* Hagiwara, Takahiro.		
Ring, Roland. Well surveying instrument, U. S. patent	151	14172
Riordan, M. B. *See* Mathews, H. A.		
Riznichenko, IU. V. *See* Riznichenko, Yu. V.		
Riznichenko, Yu. V. A joint treatment of observations of seismic frontal waves	149	13714
——— The determination of the position of the refracting boundary under the assumption that it is plane in the region of the arrival of seismic waves	148	13460
Roberts, E. B., and Ulrich, F. P. Seismological activities of the U. S. Coast and Geodetic Survey in 1950	151	14052
Roberts, F. H. H., Jr. Carbon-14 dates and archeology	149	13641
Robinson, A. D. *See* Beckman, A. O.		
Robinson, W. A. *See* Cartier, W. O.		
Roch, A. *See* Gerrard, J. A. F.		
Roche, Alexandre. On inverse remanent magnetization in the volcanic rocks of the mountains of Auvergne	148	13320
Roever, W. C. *See* Kaufman, Sidney		
Rogers, G. R. Subsurface gravity measurements	149	13697
Roman, Irwin. Resistivity reconnaissance in Symposium on surface and subsurface reconnaissance	150	13945
Romberg, Frederick. Limitations of the seismic method of mapping faults	151	14121
Rosaire, E. E. Studies in nonstructural petroleum prospecting II. The comparative resolution of pertinent Gulf Coast refraction anomalies	149	13709
Rose, J. E., and Hinspater, E. W. Pocket ionization chamber, U. S. patent	149	13794
Rose, W. D. *See* Wyllie, M. R. J.		
Rosini, E. *See* Giorgi, Maurizio.		
Rothé, Edmond, and Rothé, J. P. Geophysical prospecting	151	14085
Rothé, J. P. *See* Rothé, Edmond.		
Roulston, K. L. *See* Lundberg, Hans.		
Roze, T. N. Determination of the depth of some sources of magnetic anomalies within the European part of the U. S. S. R.	151	14099
——— Magnetic properties of certain rocks at different temperatures	148	13322
Rozova, Ye. A. Positions of epicenters and hypocenters of earthquakes in Central Asia	149	13604
Rühmkorf, H. A. Contribution to the question concerning the velocity of propagation in Tertiary sediments of the upper Rhine graben	148	13468
Rumbaugh, L. H., Jensen, Homer, and Balsley, J. R., Jr. Method and apparatus for conducting geophysical surveys, U. S. patent	150	13983
Rummerfield, B. F. Seismic exploration of the Denver-Julesburg basin	149	13720
Russell, W. L. Interpretation of neutron well logs	150	13976
Ryskina, Z. V. Diurnal variation of magnetic activity according to *K*-index in Keles	150	13835

S

Sadahiro, Taro. Measurements of underground radioactivity (first report)	148	13488
Saito, Sadao. *See* Hagiwara, Takahiro.		
Sakuma, Shūzō, and Minakami, Takeshi. Minor activity of volcano Yake-yama in 1949	149	13613
Sandoval, R. O. Geomagnetic Services. Basic magnetic data in the Republic of Mexico	149	13580
Sans Huelin, Guillermo. Airborne magnetic prospecting	148	13444
——— Geodetic tying of the American continent with Europe and Africa	148	13305
Satō, Mitsunosuke, and Suyama, Junji. Geophysical prospecting in Takanokura Mine, Soma County, Fukushima Prefecture	149	13703
Satō, Yasuo. Distribution of surface stress generating no Rayleigh waves	151	14034
——— Equivalent single layer to double superficial layer	149	13590
——— Generation of Love and other type *SH*-waves	151	14033
——— Love waves propagated upon heterogeneous medium	149	13591
——— Love waves with double superficial layer	149	13589
——— Mathematical study of the propagation of waves upon stratified medium	149	13584
	149	13585

	No.	Abstract
Sato, Yasu. Rayleigh waves propagated along the plane surface of horizontally isotropic and vertically aelotropic elastic body	150	13843
——— Transformations of wave functions related to the transformations of coordinate systems	149	13581
	149	13582
——— Velocity of Love waves	149	13587
——— Velocity of surface waves propagated in elastic plates	149	13588
See also Takahashi, Takehito.		
Savarenskiĭ, E. G. *See* Savarenskiy, Ye. G.		
Savarenskiy, Ye. G. On the angle of emergence of seismic rays and certain related questions	151	14036
Saxov, S. E. The Danish gravity reference stations	150	13818
——— The variation of gravity within the earth	151	14004
Schaeffer, O. A. *See* Katcoff, S.		
Schaffhauser, Edith. Influence of rapid variations of the acceleration of gravity on the earth's surface	151	14005
Schaffhauser, J. Piezoelectric method of measuring the variations of atmospheric pressure	149	13627
Scharon, H. L. Electrical restivity geophysical method as applied to engineering problems	151	14128
Scheffer, Viktor, and Kántás, Karl. The regional geophysics of Transdanubia	149	13560
Scheidegger, A. E. Physical aspects of the contraction hypothesis of orogenesis	151	14078
——— Physical aspects of the convection-current hypothesis of orogenesis	150	13903
Scheidegger, A. E., and Wilson J. Tuzo. An investigation into possible methods of failure of the earth	151	14077
Scherbatskoy, S. A. High-efficiency ionization chamber, U. S. patent	150	13997
Schneider, B. B. Radiation detector, U. S. patent	149	13792
Schneider, Hans, Truelsen, Christian, and Thiele, Heinrich. Procurement of water	151	14137
Schonstedt, E. O. Anchoring and connecting means for strain-cord electrical cables. U. S. patent	148	13515
Schriever, William. Sound ranging in a medium having an unknown constant phase velocity	151	14122
Schulze, G. A. *See* Reich, Hermann.		
Schütte, H. The determination of earth's flattening from the catalog of gravity data compiled by N. F. Zhuravlev	148	13286
Schwarzbach, M. The earthquakes of the Rhineland	150	13865
Schwendinger, W. W. *See* Howell, B. F., Jr.		
Scott, H. S. The significance of aeromagnetic data	150	13927
Scott, L. B. *See* Mathews, H. A.		
Scotty, C. B. Quantitative log interpretation of the San Andres dolomite	148	13502
Seavey, G. C. Generation and transmission of sound pulses, U. S. patent	151	14156
Seavey, G. C., and Horsley, C. B. Means for application of alternating shear at sonic frequencies to the treatment of material. U. S. patent	148	13523
Seigel, H. O. Ore body size determination in electrical prospecting	151	14129
Seki, A. *See* Homma, S.		
Seligman, P. *See* Gane, P. G.		
Serra, Nicolas. *See* Ferrer, Arturo		
Sewell, B. W. Well logging apparatus, U. S. patent	151	14180
Sharpe, J. A., and Fullerton, P. W. An application of punched card methods in geophysical interpretation	151	14086
Shearin, H. M., Jr. *See* Winsauer, W. O.		
Shepard, E. R. Subsurface explorations by geophysical methods	150	13920
Shimazu, Yasuo. Density distribution and concentration of heavy materials within the earth	148	13426
——— The density distribution within the earth after Bullen and the coefficient of $\sin^2 2\phi$ in the gravity formula	149	13548
Shimazu, Yasuo, and Takeuchi, Hitoshi. Effect of tension upon the elastic parameters of isotropic solids	149	13677
——— Propagation of elastic waves in a medium under finite initial tensions	149	13583
Shimozuru, Daisuke. Dynamical measurement of the elastic constants of rocks subjected to initial stresses	149	13676

	No.	Abstract
Shorey, R. R., *See* Hurley, P. M.		
Siegert, A. J. F. Process for detecting gamma rays, U. S. patent	149	13793
Sigurgeirsson, Thorbjörn. *See* Einarsson, Trausti.		
Silverman, Daniel. Seismic-wave generator, U. S. patent	150	13988
Sima, Hiromu. *See* Nakamura, S. T.		
Simon, R. F., and Heaps, S. N. Surface generation of seismic waves, U. S. patent	148	13526
Simpson, D. J. Some results of radiometric logging in the boreholes of the Orange Free State gold fields and neighboring areas	149	13769
Simpson, D. J., and Bouwer, R. F. Radioactivity logging	148	13503
Simpson, J. A., Jr. Radiation counter U. S. patent	150	13998
——— Radiation device and method of construction, U. S. patent	150	13993
Simpson, N. B. *See* Niles, J. A.		
Singer, S. F., Maple, E., and Bowen, W. A., Jr. Evidence for ionosphere currents from rocket experiments near the geomagnetic equator	148	13311
Sivaramakrishnan, M. V. Geomagnetic field variations at Kodaikanal	149	13575
Skomal, E. N. *See* Yost, W. J.		
Skugarevskaya, O. A. Spreading of electrical current along an infinite circular cylinder	148	13477
——— The final stage of the transient of the current in a layer spread over a perfectly conductive foundation	148	13475
——— The initial stage of the transient of electrical current in a layer spread over a perfectly conductive foundation	148	13474
Skugarevskaya, O. A. *See* Tikhonov, A. N.		
Slack, H. A. Field measurement of the radioactivity of rocks	151	14067
Smith, P. V., Jr., and Hudson, B. E., Jr. Abundance of N^{15} in the nitrogen present in crude oil and coal	148	13384
Sobieski, Zenon. *See* Uchman, Jan.		
Solaini, Luigi. An example of siesmic exploration of a rocky foundation	149	13723
——— Principal characteristics and results of the gravimetric surveys made in Italy for oil and gas exploration	149	13698
Somers, E. V. *See* Broding, R. A.		
Sorge, B. W. Safety and geophysical exploration	149	13692
Sorskiĭ. *See* Sorskiy.		
Sorskiy, A. A. *See* Belousov, V. V.		
Spangler, M. B. *See* Wyllie, M. R. J.		
Spicer, H. C. Electrical resistivity studies of subsurface conditions near Antigo, Wisconsin	151	14134
Sretenskiĭ. *See* Sretenskiy.		
Sretenskiy, L. N. Propagation of lastic waves produced by a system of normal stresses over the surface of semi-space	151	14031
Stanbrough, J. H. *See* Hughes, D. S.		
Standil, S. *See* Pringle, R. W.		
Stechschulte, V. C. A method of obtaining *P* and *S* travel time curves within a "stripped earth"	151	14040
Steenland, N. C., and Woollard, G. P. Gravity and magnetic investigations of the structure of the Cortlandt Complex, New York	151	14093
Stein, Paul. Nuclear counters	148	13483
Steinberg, J. L. *See* Denisse, J. F.		
Stephen, J. H. *See* Gane, P. G.		
Stoyko, Nicolas. On the seasonal variation of the rotation of the earth during the years 1945–46	148	13291
——— Variable magnetic field of stars	151	14017
Stripling, A. A. Well logging instrumentation	150	13963
See also Broding, R. A.		
Sturgis, H. F. *See* Niles, J. A.		
Suess, H. E., and Brown, Harrison. I^{129} and the age of the elements	148	13374
Summers, G. C., and Broding, R. A. Continuous velocity logging	150	13964
Suyama, Junji. *See* Satō, Mitsunosuke.		
Suzuki, Ziro. On *S′* waves	148	13332
See also Asada, Toshi.		
Swallow, J. C. *See* Gaskell, T. F.		
Swan, B. G., and Becker, Adrian. Comparison of velocities obtained by delta-time analysis and well velocity surveys	150	13938

	No.	Abstract
Swift, Gilbert. Simultaneous gamma-ray and neutron logging	149	13767
Swift, L. M. Casing collar locator, U. S. patent	150	13999
Swords, H. L. Exploratory activity in the Permian Basin	150	13910
Szebehely, V. G., and Pletta, D. H. The analogy between elastic solids and viscous liquids	148	13420

T

Tajime, Kyoji. A simple method for measuring the voltage-sensitivity of an electromagnetic transducer	148	13509
——— Improvements of the equipment for acquiring the uniform rotation by self-maintained vibration	148	13508
——— On the illuminating lamp of an oscillograph used for the seismic prospecting	148	13510
Takagi, S. Distribution of initial motions of the Great Kwanto Earthquake	148	13365
Takahashi, Takehito, and Satō, Yasuo. On the theory of elastic waves in granular substances pt. 2	150	13840
Takeuchi, Hitoshi. Equations of motion of self-gravitating elastic sphere of variable density and elasticity	149	13668
——— On the earth tide in the compressible earth of varying density and elasticity	149	13667
See also Shimazu, Yasuo.		
Tamayo, J. L. General geography of Mexico. Physical geography	148	13299
Tandon, A. N. A simplified model of Wood-Anderson seismograph	149	13598
——— Earthquakes	149	13605
Tanni, L. I., and Niskanen, Erkki. The geoidal undulations and disturbing masses	148	13284
Tarrant, L. H. Tidal gravity experiments at Peebles and Kirklington	150	13809
Tateishi, Tetsuo. Seismic prospecting at Toyosuto coalfield, Hokkaido	151	14124
Taylor, E. F. *See* Ferrer, Arturo.		
Taylor, H. W. *See* Pringle, R. W.		
Tazieff, H. Etna and its recent eruption	150	13896
Teisseyre, Roman. Methods of apparent resistivity and of potential-drop-ratio in geoelectric prospecting	150	13946
Tercedor, Mariano. The tectonics of the Granada basin in relation to its high seismicity	149	13616
Termer, Franz. Activity of Parícutin Volcano in November 1949	149	13655
Terry, J. M. *See* McGaha, S. W.		
Test, M. J. *See* Krasnow, Shelley.		
Thayer, J. M., and Fearon, R. E. Method for neutron well logging. U. S. patent	148	13540
——— Method for neutron well logging. U. S. patent	148	13541
Thellier, Émile. Magnetic properties of terra cotta and of rocks	148	13317
Thellier, Émile, and Thellier, Odette. On the direction of the earth's magnetic field rediscovered on kiln walls of Punic and Roman times at Carthage	148	13321
——— On the direction of the geomagnetic field in the region of Treves, about 380 A. D	149	13579
Thellier, Odette. *See* Thellier, Émile.		
Thiele, Heinrich. *See* Schneider, Hans.		
Thomas, M. E. Seismometer, U. S. patent	151	14160
See also Piety, R. G.		
Thompson, W. B. Thermal convection in a magnetic field	148	13389
Thorarinson, Sigurdur. The approach and beginning of the Hekla eruption. Eye witness accounts	149	13647
——— The eruption of Mt. Hekla	148	13403
Thralls, H. M., and Mossman, R. W. Relation of seismic corrections to surface geology	149	13717
Tickner, A. J. *See* Mayes, F. M.		
Tikhonov, A. N., and Skugarevskaya, O. A. The transient of electrical currents in a heterogeneous stratified formation	148	13746
——— The transient of electric current in a heterogeneous stratified medium	148	13473
Tinder, B. M. *See* Lee, Frank W.		
Tixier, M. P. Porosity index in limestone from electrical logs	149	13760

	No.	Abstract
Tixier, M. P., and Forsythe, R. L. Application of electrical logging in Canada	148	13499
Tomaschek, R. Harmonic analysis of tidal gravity experiments at Peebles and Kirklington	150	13810
Tomkeieff, S. I. The volcanoes of Kamchatka	148	13397
Tomoda, Yoshikumi. *See* Asada, Toshi		
Topper, Wilfred, and Greer, W. J. A new system of electric logging	149	13748
Towles, H. C., Jr. A study in integration of geology and geophysics	151	14104
Tribalto, G. *See* Boaga, Giovanni.		
Trögen, E. *See* Borchert, H.		
Truelsen, Christian. *See* Schneider, Hans.		
Tryon, L. E. *See* Kulp, J. L.		
Tsuboi, Chuji. Apparent change in inclination of the base line rhombus at Mitaka	149	13669
——— Determination of the Richter-Gutenberg's instrumental magnitudes of earthquakes occurring in and near Japan	148	13344
——— Passive seismicity index number for destructive earthquakes in Japan	149	13621
——— The direct and indirect methods for determining the thickness of the isostatic earth's crust	149	13550
Tsubokawa, Ietsune. General description of a new type magnetometer	148	13436
Tsuya, Hiromichi. *See* Ichimura, Takeshi		
Tucker, P. M. High magnetic effect of lateritic soil in Cuba	151	14098
Tullos, F. R. Acoustic well logging. U. S. patent	148	13542
Turlygin, S. Ya. and Karelina, N. A. The influence of dry land and sea on the distribution of telluric currents over the surface of the earth	151	14029
Tvedt, T. J. *See* Fay, C. H.		

U

Uchman, Jan and Sobieski, Zenon. Description of instruments employed in geophysical exploration by resistivity method	150	13948
Uffen, R. J. A method of estimating the melting-point gradient in the earth's mantle	151	14070
Uganda Protectorate Geological Survey. Department Records: year ending 31st December 1950	150	13915
Ulrich, F. P. *See* Murphy, L. M., *and* Roberts, E. B.		
Umbach, P. H. Exploration expands in the Four Corners region	150	13911
Umbgrove, J. H. F. A model of the earth's crust	149	13681
——— Rhythm and synchronism of tectonic movements	148	13416
Unthank, H. W. *See* Ferraro, V. C. A.		
U. S. Geological Survey. Total-intensity aeromagnetic maps of Indiana. Maps GP 103–114	148	13448
——— Total-intensity aeromagnetic and geologic maps of Minnesota. Maps GP 91–96	148	13449
Uyeda, Seiya. *See* Nagata, Takeshi		
Uzelac, M. D. Seismic characteristics of the Bačka and Baranja regions	148	13362

V

Vajk, Raoul. Geophysical exploration of southwest Hungary	149	13691
Valle, P. E. On the increase of the temperature in the mantle of the earth due to adiabatic compression	149	13644
——— The adiabatic temperature gradient in the interior of the earth	150	13890
Van Bemmelen, R. W. Report on the volcanic activity and volcanological research in Indonesia during the period 1936–1948	148	13410
——— The endogenic energy of the earth	149	13663
Vance, Harold. Petroleum subsurface engineering	150	13921
Vander Elst, N. Meteorological and geophysical installations at Binza	149	13628
Vellinger, E. Surveying of the drill holes by mud logging	149	13744
Vening Meinesz, F. A. A third arc in many island arc areas	149	13675
——— The origin of continents and oceans	151	14076
Vincent, R. P. *See* Niles, J. A.		

	No.	Abstract
Vinogradov, A. P., Zadorozhnyy, I. K., and Zhukov, S. I. Isotopic composition of lead and the age of the earth	151	14064
Vogel, C. B. A seismic velocity logging method	150	13965
Volchok, H. L. *See* Kulp, J. L.		
Volk, J. A. System of seismographic visual recording, U. S. patent	151	14150
Vvedenskaya, A. V. The determination of dynamic parameters of the foci of earthquakes from the records of remote stations	150	13847

W

Wait, J. R. The cylindrical ore body in the presence of a cable carrying an oscillating current	149	13730
——— The magnetic dipole over the horizontally stratified earth	151	14095
Walker, G. B., and O'Dea, P. L. Geomagnetic secular-change impulses	151	14019
Walsh, P. J. Gravity meter. U. S. patent	148	13513
Walstrom, J. E. Coring, electric logging, and other testing methods in exploratory wells	149	13745
——— The quantitative aspects of electric log interpretation	149	13752
Wantland, Dart. Geophysical measurements of the depth of weathered mantle rock	151	14088
Watanabe, Akira. Geomorphology of the coastal districts of the southern part of Sikoku Island and its bearing on the crustal deformation accompanying great Naki Earthquakes	149	13619
Watanabe, Takeshi. Dynamical studies of the surface structure of the ground	148	13464
Waters, H. C. Electrical well logging system, U. S. patent	151	14177
Weatherby, B. B. Some aspects of seismic surveys	150	13932
——— Some uses and abuses of the seismic method	148	13456
——— Uses and abuses of the seismic method	149	13708
Weber, Max. *See* Gassmann, Fritz.		
Weiss, Oscar. Contribution of geophysical surveys to the discovery of Stilfontein Gold Mine in South Africa	149	13699
Weller, B. L. Radiation detector circuit, U. S. patent	151	14167
Wells, W. M. *See* Allen, C. F.		
Wentworth, C. K. *See* Macdonald, G. A.		
Wesley, R. H. Geophysical exploration in Michigan	149	13724
See also Johnson, A. M.		
West, T. S. Well tester, U. S. patent	151	14173
Whetton, J. T., and Myers, J. O. Geophysical surveys of magnetite deposits in Strath, Island of Skye	150	13926
——— *See also* Habberjam, G. M.		
Whitehead, W. L. *See* Breger, I. A.		
Whitham, Kenneth. Laboratory scintillation counters applied to some geophysical problems	151	14068
Widess, M. B. Salt solution, a seismic velocity problem in Western Anadarko Basin	150	13941
Wieladek, Romuald. Gravimetric base measurements in northeastern Poland	150	13819
Wilhelm, E. S. *See* Broding, R. A.		
Wilkins, G. A. *See* Price, A. T.		
Williams, M. *See* Winsauer, W. O.		
Willmore, P. L., Hales, A. L., and Gane, P. G. A seismic investigation on crustal structure in the western Transvaal	148	13340
Wilson, J. Tuzo. Orogenesis as the fundamental geological process	150	13902
See also Scheidegger, A. E.		
Winn, R. H. *See* Howard, R. C.		
Winsauer, W. O., Shearin, H. M., Jr., Massom, P. H., and Williams, M. Resistivity of brine-saturated sands in relation to pore geometry	149	13757
Winterhalter, A. C. Cable provided with polarized outlets for seismic prospecting. U. S. patent	148	13519
——— Seismic exploration apparatus, U. S. patent	150	13987
Wolf, Alexander. Reflection seismic exploration. U. S. patent	148	13516
Wood, F. W. A new type of surface wave from earthquakes	149	13601
Wood, H. O., and Heck, N. H. Earthquake history of the United States, Pt. 2—Stronger earthquakes of California and western Nevada	148	13347

	No.	Abstract
Woods, J. P. Seismic method and apparatus, U. S. patent	149	13780
——— Up-hole times	149	13711
Woollard, G. P. *See* Steenland, N. C.		
World Petroleum. Oil explorations in North Africa	150	13913
Worzel, J. L., and Ewing, Maurice. Gravity measurements at sea, 1948 and 1949	150	13814
See also Ewing, Maurice.		
Wright, T. R., and Pirson, S. J. Porosity-profile determination from electric logs	149	13758
Wuenschel, P. C. *See* Officer, C. B., Jr.		
Wyllie, M. R. J. An investigation of the electrokinetic component of the self-potential curve	150	13970
——— Procedures for the direct employment of neutron log data in electric log interpretation	151	14139
——— Theoretical considerations involved in the determination of petroleum reservoir parameters from electric log data	149	13753
Wyllie, M. R. J., and Hogg, G. A. Method for determining a parameter of earth formations penetrated by a borehole. U. S. patent	148	13546
Wyllie, M. R. J., and Morgan, Frank. Comparison of electric log and core analysis data for Gulf's Frank No. 1, Velma pool, Stephens County, Okla	148	13500
Wyllie, M. R. J., and Rose, W. D. Some theoretical considerations related to the quantitative evaluation of the physical characteristics of reservoir rock from electrical log data	150	13972
Wyllie, M. R. J., and Spangler, M. B. Application of electrical resistivity measurements to problem of fluid flow in porous media	149	13754

Y

Yamada, Juhei. *See* Hagiwara, Takahiro.		
Yamaguchi, Hisanosuke, Yamaguchi, Ryuichi, and Yanase, Akira. On prospecting for leakage water at the Hamura-Weir	148	13482
Yamaguchi, Ryuichi. *See* Yamaguchi, Hisanosuke.		
Yanase, Akira. *See* Yamaguchi, Hisanosuke.		
Yepinat'yeva, A. M. A method of determining the difference between the coefficients of absorption of seismic waves	151	14108
See also Berson, I. S.		
Yokoyama, Izumi. Magnetization of the gabbro from Mt. Tsukuba with special relation to the geomagnetic anomalies	149	13578
Yoshiyama, Ryoichi. On the travel of seismic waves from the Fukui earthquake of 1948 and the crustal structure in Japan	148	13337
Yost, W. J. The interpretation of electromagnetic reflection data in geophysical exploration—Part I, General theory	148	13479
Yost, W. J., Caldwell, R. L., Beard, C. I., McClure, C. D., and Skomal, E. N. The interpretation of electromagnetic reflection data in geophysical exploration. Pt. 2, Metallic model experiments	151	14130
Young, E. T. Well surveying instrument, U. S. patent	151	14176
Yrizar, Pedro de, Mendez de Vigo, Alfonso, Peña, Vicente, and Munuera, J. M. Investigation of magnetic instruments for determinations of absolute values	150	13827
Yüngül, Sulhi. Correlation and some geological interpretation of the seismic and gravimetric surveys in Çukurova	149	13726
Yun'kov, A. A. Determination of the position and dimensions of a homogeneous ellipsoid of revolution with vertical axis from the observational data obtained with static gravimeter and the torsion balance	148	13287

Z

Zaccara, Gaetano. The application of the geoelectric method in prospecting for water	150	13955
See also Boaga, Giovanni.		
Zaccara, Gaetano, and Manfredini, Antonio. Geoelectric investigation of a foundation site	150	13954
Zadorozhnyy, I. K. *See* Vinogradov, A. P.		

	No.	Abstract
Zavala, Joaquín. Vulcan's land	148	13399
Zavaritskiy, A. N. The eruption of Hekla volcano	150	13895
Zhukov, S. I. *See* Vinogradov, A. P.		
Ziemer, C. W. *See* Niles, J. A.		
Zimmerman, C. W. Electrostatically shielded magnetic well logging system U. S. patent	151	14181
See also Broding, R. A.		
Zisler, Siegfried. *See* Denisse, J. F.		
Zollers, S. M. Radioactivity survey apparatus, U. S. patent	151	14168
Zubanov, B. G. *See* Berel'kovskiy, Ts. Ya.		
Zvyagintsev, O. Ye. Radioactivity and the thermal balance of the earth	148	13391

SUBJECT INDEX

	Author	Abstract
Acoustic logging	Stripling	13963
Adriatic Sea, microseism origin in	Caloi	13625
Africa, exploration for petroleum	World Petroleum	13913
gravity measurements	Duclaux	13304
Age determinations carbon-14 method of	Kulp	14065
by radiocarbon and titanium content	Arrhenius	13888
Pacific chalk ooze	Arrhenius	13888
radioactive methods of	Burling	13881
Age of the crust	Alpher	13375
	Burling	13376
Age of the earth	Jeffreys	14074
	Vinogradov	14064
Age of the earth, lead isotope ratios and	McCrady	13633
methods of determining	Bruckshaw	13630
Age of the elements	Burling	13376
	Katcoff	13373
	Suess	13374
Airborne magnetic exploration	Cheney	13443
	Jenny	13446
	Sans Huelin	13444
	Scott	13927
Airborne magnetic surveys, Delaware basin, Tex.-N. Mex	Hoylman	13445
eastern Pennsylvania	Jensen	13704
New Zealand, Mernoo Bank	Fleming	13707
South Africa, Stilfontein gold mine	Weiss	13699
Airborne radioactivity surveying	Cook	14138
	Lundberg	13742
	Peirson	13489
Airborne radioactivity surveys, in petroleum exploration	Lundberg	13960, 13961
Air-coupled waves, generated by earthquake	Benioff	13334
theory of	Jardetzky	13844
Air-coupled surface waves	Haskell	13594
Air drilling in seismic surveys	Burke	13944
Alaska, geothermal investigations on Artic slope	MacCarthy	13891
gravity measurements along coast	Worzel	13814
Alberta, aeromagnetic maps of quadrangles in	Canada Geological Survey	13450
exploration problems in	Houghton	13686
Aleutian Islands, earthquake distribution, depth, and magnitude	Koning	14056
gravity measurements in	Worzel	13814
Algeria, gravity anomalies, Alger province	Glangeaud	14014
Alpha activity, North Atlantic cores	Kulp	14066
thoron and radon	Hurley	14063
Alpha ionization damage in minerals	Hurley	13632
Alpha particles, statistical distribution on photographic plate	Imbô	13884
Altimetric survey, Luxembourg	Gloden	14013
Altitude of continents, relation to area	Matschinski	13419
Anorthosite, radioactivity in	Picciotto	13635
Antilles, geologic structure and gravity anomalies	Gerth	13558
Arctic ice islands, seismic surveys on	Crary	14050
Arctic Ocean, geophysical studies in	Crary	13556
Arizona, exploration in San Juan basin	Clayton	14087
geophysical activity and drilling in Four Corners region	Umbach	13911
Asbestos, magnetic exploration for	Low	13439
Asia, central, earthquakes in	Rozova	13604
Assam, earthquake Aug 15, 1950	Kingdon-Ward	13364
	Normandin	13874
Atlantic Ocean, gravity measurements in	Worzel	13814
radioactivity of deep sea cores	Kulp	14066
radium content of deep-sea sediments in	Bernert	13887
seismic refraction surveys in	Gaskell	13338
	Hersey	14048
	Hill	14049
	Officer	13852
Autoradiography, evaluation of uranium and thorium by statistical distribution of alpha particles in	Imbô	13885
	Imbô	13884
Baffin Island, gravity measurements on Barnes Ice-cap	Littlewood	14010
Bahama Islands, gravity measurements near	Worzel	13814
gravity surveys	Lee	13298
Barometric pressure, microvariations of	Dessauer	13628
Barometric pressure, piezoelectric method of measuring	Schaffhauser	13627
Beaufort Sea, geophysical studies in	Crary	13556
Belgian Congo, observatory near Binza	Vander Elst	13628

	Author	Abstract
Belgium, earthquakes, Hainaut	Fourmarier	13350
earthquakes, Mons region Apr.–May 1949	Marliere	13351
earth's crust in	Charlier	13300
gravity surveys	Jones	13559
precise leveling in	Jones	13559
seismic activity in	Charlier	13343
Bering Sea, gravity measurements in	Worzel	13814
Bermuda, seismic refraction surveys in	Officer	13852
Bibliography of seismology, Jan.–June 1950	Milne	13326
July–Dec. 1950	Milne	13327
Jan.–June 1951	Milne	13328
Blasting, vibrations from	Morris	13472
Boundary effect, buried charged body	Gel'fand	14132
Boundary shear waves	Homma	13841
Bradford sand, dimensional orientation in	Griffiths	13497
directional permeability in	Griffiths	13497
permeability	Howell	13498
porosity	Howell	13495
Brazil, Conselho nacional do petroleo report	----------	13688
California, earthquakes	Wood	13347
earthquakes near Manix	Richter	13606
fault movements related to earthquakes	Dehlinger	13857
seismic wave velocities in	Gutenberg	13851
Canada, electrical logging in	Tixier	13499
geophysical exploration in western	Houghton	13909
geophysical exploration problems in	MacMillan	13428
gravity measurements along coast	Worzel	13814
heat flow, Kirland Lake region	Leith	13892
Canary Islands, genesis of	Cabrera Kabana	13662
	Martel Sangil	13661
volcanic eruption	Bonelli Rubio	13404
Carbon-14, in deep sea sediments	Kulp	13640
method of age determination	Kulp	14065
Carbon-14 contamination	Bliss	13642
Carbon-14 dates	Arnold	13379
	De Geer	13382, 13383
	Johnson	13378
Carbon-14 dating, errors in	Bartlett	13380
for British Isles samples	Godwin	13643
in Mexico	de Terra	13381
of archeologistical material	Roberts	13641
Carbon-14 determinations, techniques of	Kulp	13639
Caribbean Sea, earthquake distribution, depth, and magnitude	Koning	14055
gravity map of	de Bruyn	13557
Carthage, remanent magnetization	Thellier	13321
Central America, earthquake distribution, depth, and magnitude	Koning	14055
Chubb crater. See Ungava Crater.		
Chukchi Sea, gravity measurements in	Worzel	13814
Clay, electrical conductivity	Berg	13496
Coal, geophysical methods of exploration	Peltz	13923
N^{15} abundance in	Smith	13384
seismic surveys, Japan	Iida	13471
	Iida	14125
	Tateishi	14124
Colombia, structure of	Oppenheim	14080
Colorado, geophysical activity and drilling in Four Corners region	Umbach	13911
exploration in San Juan basin	Clayton	14087
seismic exploration in Denver-Julesberg basin	Rummerfield	13720
Composition of the earth	Colton	13424
Compression, effect of internal temperature	Valle	13644
Concrete, testing by seismic wave velocity	Andersen	13602
Connate-water resistivity, chart, Oklahoma	Puzin	13973
Constriction, effect on flow of electric current in porous body	Owen	13974
Continents, average elevation and geodynamic forces	Matschinski	13419
origin of	Vening Meinesz	14076
Continents and oceans, effect of core on distribution	Havemann	14079
Convection-currents hypothesis physical aspects of	Scheidegger	13903
Core, composition of	Birch	13682, 14075
effect on earth's surface	Havemann	14079
longitudinal waves through	Denson	1385
rigidity of	Suzuki	13332
temperature in	Valle	13644, 13890
Core analysis, methods of	Pollard	13746
Cortlandt complex, gravity and magnetic investigation of	Steenland	14093
Cosmogony, theories of	Ortiz de Villacian	13901
U. S. S. R. conference on	Akademiya Nauk	13417
Crust, age of the	Alpher	13375
	Burling	13376
constitution of	Borchert	13680
	Umbgrove	13681
deformation of, by earth quake at Kanto, Japan	Danilov	13366
from geodetic data	Caloi	13553
electrical state of	Rikitake	13323
heat balance of	Nawijn	13390
in Belgium	Charlier	13300

	Author	Abstract
Crust—Continued		
magnetic field of	Haalck	13829
mechanism of yielding	Scheidegger	14077
stress and strain in	Nadai	13665
structure of	Ewing	14004
	Mintrop	14039
Atlantic Ocean	Officer	13852
central Italy	Di Filippo	13607
determination from teleseismic records	Gayskiy	13603
from Helgoland explosion observations	Reich	13341
Kirghiz S. S. R.	Gamburtsev	13848
southern California	Gutenberg	13851
thickness of, central Siberia	Gayskiy	13603
thickness of isostatic	Tsuboi	13550
vertical and tangential forces in development of	Fourmarier	13900
Crustal structure, Japan	Yoshiyama	13337
western Transvaal	Willmore	13340
Cuba, geophysical exploration in	Knowles	13912
magnetic survey	Tucker	14098
Cylindrical ore body in presence of cable carrying oscillating current	Wait	13730
Decca navigator system	Oil Progress	13512
Deccan trap, gravity anomalies in	Glennie	13306
Deep sea sediments, C^{14} measurements in	Kulp	13640
Deformation, associated with earthquakes	Tsuboi	13669
accompanying earthquakes, maximum gradients of	Imamura	14051
secular, Miura-hanto, Japan	Hagiwara	13670–13673
Denmark, gravity reference stations	Saxov	13818
Density, distribution within earth	Shimazu	13426, 13548
gravimetric determination of	Parasnis	13826
rock in English Midlands	Parasnis	13826
rocks of Ireland	Jackson	12567
Deviations of the vertical, tidal nomogram	Malone	13811
Dielectric constant log	Stripling	13963
Dynamic studies of surface structure	Watanabe	13464
Earth, composition of	Colton	13424
origin of	Colton	13424
	Jeffreys	13679
Earth currents, influence of land and sea on distribution	Turlygin	14029
magnetic field of earth's crust and	Haalck	13829
perturbations at Garm	Ivanov	13325
rapid variations of	Beaufils	14030
relation to electrical state of crust	Rikitake	13323
spectral analysis	Beaufils	13838
Earth inductor, miniature	Rikitake	13437
Earthquake aftershocks, relation of area to radius of sensibility circle	Homma	13345
Earthquake damage, relation to topography	Nakano	13620
Earthquake danger, seismotectonic method of determining	Akademiya Nauk SSSR Vestnik	13346
Earthquake distribution, depth, and magnitude, Aleutian Islands	Koning	14056
Caribbean area	Koning	14055
Central America	Koning	14055
Malay Archipelago	Koning	13861
Mediterranean region	Koning	14056
Pacific coast of North America	Koning	14056
South America	Koning	14054
southern Antilles	Koning	14055
Earthquake effects, Assam 1950	Normandin	13874
Earthquake frequency, Japan	Kawasumi	13622
Earthquake frequency and energy	Asada	13862
Earthquake intensity, Japan	Kawasumi	13622
effect of coal layer on	Charlier	13343
Earthquake magnitude, determination from vertical component of surface waves	Bath	13342
Earthquake motions, effect of solid viscosity of surface layers on	Kanai	13845
Earthquakes, Assam, Aug. 15, 1950	Normandin	13874
Assam-Tibet, 1950	Kingdon-Ward	13364
associated with volcanic eruptions	Kizawa	14072
	Minakami	13614, 13615
	Sakuma	13613
Belgium, Hainaut	Fourmarier	13350
Mons region, Apr.-May 1949	Marliere	13351
California	Wood	13347
Manix	Richter	13606
central Asia	Rozova	13604
Greece, Larissa region 1892 and 1941	Galanopulos	13358
Hawaii, Kilauea, April 22, 1951	Macdonald	13610
Kona, Aug. 21, 1951	Macdonald	13611
Hungary, western	Scheffer	13560
international cooperation in locating, during 1951	Due Rojo	14061
Japan	Tsuboi	13621
aftershocks of Imaichi	Miyamura	13873
Imaichi aftershocks	Kishinouye	13872
Imaichi Dec. 26, 1949	Koshikawa	13871
Kanto, initial motions in	Takagi	13365
Nankaido, deformation following	Okuda	13554
	Watanabe	13619
Sept. 1, 1923, deformation following	Danilov	13366
Macedonia	Mihailovič	13359
magnitudes in Japan	Tsuboi	13344
Malay Archipelago	Koning	13861
maximum gradients of deformation of crust in	Imamura	14051

	Author	Abstract
Earthquakes—Continued		
Mexico	Tamayo	13299
motion at focus	Keylis-Borok	14035
from teleseismic records	Vvedenskaya	13847
graphic method of determining	Keylis-Borok	13330
Nevada	Wood	13347
New Zealand, Cook Strait, Jan.-Feb. 1950	Hayes	13870
in 1949	Hayes	13868
in 1950	Hayes	13869
wave periods in	Hayes	13860
Queen Charlotte Islands	Coulomb	13336
Rhineland, Mar. 8, 1950	Berg	13612
Rhine valley	Schwarzbach	13865
Seattle, Wash., and gravity anomalies	Heiskanen	13348
Solomon Islands, July 29, 1950	Ewing	14014
South West Africa	Korn	13618
Spain, Alicante June 9, 1947	Rey Pastor	13355
Caravaca region, Murcia	Rey Pastor	13352, 13356
Catalonia 1948–49	Fontseré	13353
Confrides (Alicante) Feb. 9, 1949	Rey Pastor	13357
Granada basin	Tercedor	13616
near Elche, 1947	Rey Pastor	13354
Tadzhik S. S. R. 1949–50	Monakhov	13867
Turkey, 1947 to 1949	Lahn	13866
Earthquakes, United States, 1950	Murphy	13863
	Roberts	14052
Pacific coast	Byerly	13864
western Washington	Nuttli	13335
U. S. S. R., Akhalkalaki plateau	Kirillova	14059
Caucasus region	Belousov	14058
Garmskaya Oblast'	Gubin	14057
Turkistan	Gubin	14053
Witwatersrand, focal depths of	Gane	14047
Yugoslavia, Bačka and Baranja regions	Uzelač	13362
Knin region	Nedeljkovič	13363
Lake Scutari region	Mihailovič	13361
Litija region	Mihailovič	13360
Mcrava valley	Mihailovič	13617
Earth tides, experimental observations	Tarrant	13809
general principles	Jeffreys	14074
in compressible earth of varying density and elasticity	Takeuchi	13667
in heterogeneous fluid globe	Jobert	13808
East Indies, earthquake distribution	Koning	13861
gravity map of	de Bruyn	13557
Ecuador, geologic structure of	Oppenheim	13423
gravity observations in	Oppenheim	13423
Elastic constants, effect of tension on	Shimazu	13667
of rocks under stress	Shimozuru	13676
Elastic energy, propagation in rocks	Evison	13463
Elasticity, theory of	Takeuchi	13668
internal constitution of earth and	Birch	13682
Elastic properties of porous media	Gassmann	13846
Elastic solids, analogy with viscous liquid	Szebehely	13420
Elastic waves, attenuations by reflected radiation and damped oscillations	Gassmann	13421
boundary value problem of generation	Homma	13842
electromechanical source	Evison	13462
equation of frequency of	Keylis-Borok	14032
generation of	Evison	13462
generation by moving stresses	Sretenskiy	14031
in granular substances, theory	Takahashi	13840
in medium of continuously varying properties	Homma	13841
model studies of	Kaufman	13600
propagation, in medium under finite tensions	Shimazu	13583
in spherical packing	Gassmann	13595
in stratified media	Satō	13584
	Satō	13585
Rayleigh, in vertically aelotropic medium	Satō	13843
theory of	Jeffreys	14074
Uller	Officer	13331
velocity, relation to pressure and temperature	Hughes	13422
Electrical anomalies, relation to gravity anomalies	Bulashevich	14133
Electrical conductivity in clay	Berg	13496
Electrical current, in infinite circular cylinder	Skugarevskaya	13477
in spherical shell	Rikitake	13324
transient in heterogeneous stratified medium	Tikhonov	13473, 13476
transient in layer over perfect conductor, initial stage	Skugaravskaya	13474
final stage	Skugarevskaya	13475
Electrical exploration, double commutator for	Borrego Gonzalez	13738
induction device for	Belluigi	13737
for water resources	Deutscher Ver. Gas-u Wasserfachmannern	13949
	Schneider	14137
for water, Italy	Manfredini	13740
ore body size, determination	Seigel	14129
Electrical field, pattern around borehole	Skugarevskaya	13477
Electrical log analysis, and core analysis compared	Wyllie	13500
slide rule calculator for	Hamilton	13501
Electrical logging, applications of	Tixier	13499
determination of ore-body size by	Seigel	14129
electrokinetic component of self-potential curve	Wyllie	13970

	Author	Abstract
Electrical logging—Continued		
German lignite deposits	Persch	13765
guard electrode system	Owen	13749
in lower Wilcox	Howard	13969
in Kansas	Decker	13764
in limestone	Archie	13761
	Decker	13764
	Doll	13759
	Tixier	13760
in sandstone	Jones	13762
instruments for	Uchman	13948
interpretation	Keller	13494
Laterolog method	Doll	13750
MicroLog method of	Doll	13869
	Guyod	13493
MicroLogging technique	Ford	13747
New Zealand water wells	McKellar	13766
porosity determination from	Howell	13495
resistivity, interpretation of	de Witte	13756
self-potential, electrokinetic component of	Wyllie	13970
shielded electrode method	Guyod	13492
shielded mono-electrodes for	Keller	13491
Electrical logs, porosity-profile determination from	Wright	13758
compared to mud analysis logs	Vellinger	13744
determination of petroleum reservoir parameters from	Wyllie	13753
fallacies in interpretation	Hamilton	13751
in water-supply investigations	Morris	13967
quantitative evaluation of physical properties from	Wyllie	13972
quantitative interpretation of	Pirson	13966
	Walstrom	13752
self-potential, in shaly sands	Doll	13971
use of neutron log data in interpretation	Wyllie	14139
Electrical methods of prospecting, textbook	Krayev	13728
Electrical mineralization indicator	Belluigi	13737
Electrical potential from buried body	Gel'fand	14132
Electrical potential-drop-ratio surveys, discussion of	Teisseyre	13946
Electrical properties of soils	Rikitake	13736
Electrical properties of soil at radio frequencies	Rikitake	13956
Electrical resistivity, apparent, calculation of in drift	Kiyono	13480
brine-saturated sands	Winsauer	13757
correlation with porosity	Howell	13495
fluid-filled porous body	Owen	13974
measurements and fluid flow in porous media	Wyllie	13754
of porous rocks	de Witte	13755
Oklahoma formations	Puzin	13973
permeability determinations from	Howell	13498
relation to fluid in rocks	de Witte	13755
relation to pore geometry	Winsauer	13757
relation to temperature	MacCarthy	13891
Electrical resistivity method, determination of inclined boundary by	Berel'kovskiy	13950
physical basis of	Malkowski	13947
Electrical resistivity sounding, three-layer problem in	Alfano	13731
in valleys	Huber	13732
Electrical resistivity surveys, airport site near Rome	Zaccara	13954
American River dam site	Wantland	14088
Antigo, Wis	Spicer	14134
Castel di Decima, Italy	Zaccara	13955
discussion of	Teisseyre	13946
in engineering problems	Bird	14089
	Moore	14127
	Roman	13945
	Scharon	14128
in highway engineering problems	Abercrombie	14126
instruments for	Uchman	13948
Japan, Tama-gawa aqueduct	Yamaguichi	13482
review of method	Roman	13945
South Africa	Enslin	13739
Tunis hydraulic sills	Castany	13481
Electrical state of crust	Rikitake	13323
Electrical survey, Gold Coast	Gold Coast Geol. Survey Dept.	13914
in coal exploration	Peltz	13923
in highway engineering	Moore	13922
Japan, Shojingawa, and Amemasugawa mines	Murozumi	14136
Sankyo mine	Kaneko	14135
Takanokura mine	Satō	13703
Uganda	Uganda Geol. Survey	13915
Electric waves, diffraction by perfectly reflecting wedge	Nomura	13729
Electrokinetic component of self-potential curve	Wyllie	13970
Electromagnetic exploration, Geoskop and Geostratimeter	Börner	13951
scale model experiments in	Clark	14131
Electromagnetic field, effect of conducting on	Wait	13730
Electromagnetic fields compensation of, in induction measurements	Lamoglie	13478
Electromagnetic reflection data, interpretation	Yost	13479, 14130
Electromagnetic shielding within earth	Rikitake	13310
Electromagnetic surveys, Geoskop and Geostratimeter	Grutjen	13952
	Heyll	13953
Electromagnetic waves, radio, diffraction around crater of Mihara-yama	Rikitake	13411
Electromechanical vibrator as energy source	Evison	13463
Electrotelluric exploration, method	Migaux	13733
quantitative interpretation	Baranov	13734

	Author	Abstract
Elements, age of	Bürling	13376
	Katcoff	13373
	Suess	13374
Ellipticity of the earth	Schütte	13286
Ellipsoid, determination from gravity data	Yun'kov	13287
Energy, endogenie, in earth	Van Bemmelen	13663
Engineering, use of geophysical methods in	Shepard	13920
Engineering problems, use of seismic methods in	Linehan	13942
	Wesley	13724
England, gravity measurements, Cambridge	Bullerwell	13816
gravity measurements, Newcastle upon Tyne	Bullerwell	13816
Southampton	Cook	13817
Teddington	Cook	13817
Westminster Cathedral	Bullerwell	13816
York	Bullerwell	13816
gravity surveys	Cook	13293
heat flow measurements	Bullard	13392
tidal gravity experiments in	Tarrant	13809
	Tomaschek	13810
Equations of motion in elastic sphere	Takeuchi	13668
Errors, in geophysical analyses	McCollum	13422
random, effect in gravity data	Elkins	13432
Etna, current investigations at	Ponte	13657
eruption in 1947	Cucuzza Silvestri	13656, 13405
types of eruptions	Ponte	13657
Exploration, Brazil	Brasil Conselho nacional	13688
geophysical, activity in 1951	Eckhardt	13908
Cuba	Knowles	13912
Four Corners region	Umbach	13911
Germany since 1945	Gees	13689
history of	Hammer	13907
in mining	García Gutiérrez	13685
in New York State	Bird	14089
in western Canada	Houghton	13909
Netherlands, Schoonebeck oil fields	Cantos Figuerola	13429
North Africa	World Petroleum	13913
operational problems of, in Alberta	Houghton	13686
Permiam basin, Texas-New Mexico	Swords	13910
problems in Andadarko basin	Clayton	13457
safety in	Sorge	13692
San Juan basin	Clayton	14087
Spain 1950	García Siñeriz	13430
Williston basin	Burg	13940
geophysical methods	Favre	13684
in engineering problems	Shepard	13920
in mineral prospecting	Reich	14084
review of	Klotz	13918
Exploration for petroleum in Uruguay	Ferrer	13687
Explosion waves, generation and propagation in rock	Obert	13599
spectrum of	Menzel	13715
wavelet theory of	Ricker	13586
Explosions, determination of direction of	Schriever	14122
seismic studies of	Gutenberg	13851
	Reich	13341
spectrum of waves from	Menzel	13933
Faulting, direction of, western Washington earthquakes	Nuttli	13335
direction of movement in, Manix earthquakes	Richter	13606
Fault movements and shear-wave vibrational directions	Dehlinger	13857
Faults, seismic investigations of, significance of diffraction	Krey	14120
seismic reflection method of mapping	Romberg	14121
radioactivity near	Ochiai	13487
Fault troughs, formation of and volcanic activity	Escher	13904
Ferrites, magnetic properties of	Grabovskiy	14022
Figure of the earth, determination by use of Prey's anomalies	Júdice	13804
development of	Haalck	13803
general discussion of	Jeffries	14074
Fluid flow in porous media	Wyllie	13754
FM logging system	Topper	13748
Formation factor, effect of constriction on	Owen	13974
France, earth current measurements	Beaufils	13838
gravity observations, Chambon-la-Forêt	Bollo	13555
isostatic anomalies in Paris Basin	Coron	13823, 13824
Pechelbronn region, geothermal anomalies	Claude	13646
Puy de Dome, radioactivity of	Garrigue	13388
thermal anomalies Pechelbronn region	Claude	13893
Fukui, Japan, earthquake	Yoshiyama	13337
Gamma radiation, field of the earth	Cook	14138
from uranium X_2	Hess	14062
Gamma-ray counter, field	Slack	14067
Geiger-Müller counter, for C^{14} measurements	Purbrick	13485
Geodesy, formulas based on isogravitational surfaces	Morelli	13805
Geodetic constants	Schütte	13286
Geodetic measurements, interpretation of	Caloi	13553
Geodetic tying, North America-Europe	Sans Huelin	13305
Geoid, southwestern Japan	Okuda	13554
Migal formula for	Monin	14007
undulations of	Tanni	13284
from torsion balance measurements	Haalck	13806
Geologic age, radioactive methods of determining	Brajnikov	13377
Geology and geophysics, study in integration	Towles	14104

	Author	Abstract
Geophysical exploration methods, use of	Mintrop	13916
textbook	Rothé	14085
Geophysical measurements, quality in	McCollum	13433
Geoskop investigations	Börner	13951
Geoskop surveys	Grütjen	13952
	Heyll	13953
Geostratimeter investigations	Börner	13951
Geostratimeter surveys	Grütjen	13952
	Heyll	13953
Geothermal anomalies, Pechelbronn region, France	Claude	13646
Geothermal conditions, Nesvetayevo-Shakhta syncline	Bankovskiy	13645
Geothermal gradient, related to petroleum occurrence	Chebotarev	13962
Germany, earthquakes in Rhine valley	Schwarzbach	13865
earthquake of Mar. 8, 1950	Berg	13612
electrical logging lignite deposits	Persch	13765
electromagnetic surveys for lignite	Grütjen	13952
	Heyll	13953
gravity pattern, southwestern	Hiller	13349
magnetic pattern, southwestern	Hiller	13349
geophysical exploration, northwestern oil fields	Marin y Bertran de Lis	13690
geophysical exploration since 1945	Gees	13689
seismic phenomena, southwestern	Hiller	13349
seismic surveys, Hamburger Loch salt domes	Helms	13943
salt domes	Brinckmeier	13469
	Gees	13725
	Helms	13470
Glaciers, flow of	Nye	13418
vertical velocity distribution	Gerrard	14083
Gold Coast, Survey Dept. report for 1950–51	Gold Coast Geol. Survey Dept.	13914
Grabens, origin of	Escher	13904
Granite, radioactivity in	Picciotto	13635
Gravimeter, bifilar, ultrasensitive	Ichinohe	13292
Nørgaard	Kolbenheyer	13294
accuracy of	Bulanzhe	13813
description	Wieladek	13819
North American, drift of	Bollo	13555
Western 49, calibration of	Boaga	13815
for relative measurements	Boaga	13820
Gravimetric network, correction by gravimeter observations	Lozano Calvo	13551
Spain	Lozano Calvo	13551
Gravity, periodic variation of	Bollo	13555
Gravimetry, relation to geology	Oulianoff	13822
Gravitational attraction, clay deposit	Cook	13825
Gravity, variation with earth rapid variations, effect on	Saxov	14004
atmosphere	Schaffhauser	14005
Gravity anomalies, analytic continuation of	Malovichko	13812
Antilles	Gerth	13558
averaging of	Malovichko	13290
compared with magnetic	Garland	13296
Deccan trap area	Glennie	13306
deflections of the vertical above sea level and	Hirvonen	14006
effect of consolidation	Cook	13825
from torsion balance measurements	Haalck	13806
graphical evaluation of	Gassmann	13695
interpretation of torsion balance measurements	Haalck	13431
Luxembourg	Gloden	14012
Madagascar	Cattala	13564
mastercharts for interpretation	Nepomnyaschikh	13696
Moluccas	Gerth	13558
Poland	Olczak	13561
relation to electrical anomalies	Bulashevich	14133
rift valleys	Goguel	13562
structure and	Glangeaud	14014
three-dimensional, interpretation	Gel'fand	14092
	Grant	13694, 14091
Gravity corrections, topographic, method of computing	García Siñeriz	14008
free air, 2d order analysis	Jeffreys	13807
Gravity data, determination of ellipsoid from	Yun'kov	13287
ellipticity of earth from	Schütte	13286
in determining geoid	Monin	14007
2d derivative values, effect of random errors	Elkins	13432
Gravity effect, hyperboloid of revolution	Pariyskiy	13288
Gravity formula, coefficient of $\sin^2 2\varphi$ in	Shimazu	13548
for the Far East	Higasinaka	13566
Gravity map, Caribbean sea	de Bruyn	13557
southeast Asia	de Bruyn	13557
Gravity measurements, Aberdeen, Scotland	Bullerwell	13816
Africa	Duclaux	13304
at sea	Worzel	13814
Cambridge, England	Bullerwell	13816
Denmark	Saxov	13818
Edinburgh, Scotland	Bullerwell	13816
India	Gulatee	13565
in Iceland	Einarsson	13297
in mines	Rogers	13697
Italy, Bari province	Boaga	13821
Italy, Rome-Bologna	Boaga	13820
Mexico	Tamayo	13299
Newcastle upon Tyne, England	Bullerwell	13816
Poland	Wieladek	13819
Southampton, England	Cook	13817
Teddington, England	Cook	13817
Westminster Cathedral	Bullerwell	13816
York, England	Bullerwell	13816

	Author	Abstract
Gravity meter, Western, for relative measurements	Boaga	13820
Gravity observations, Ecuador	Oppenheim	13423
Gravity surveys, Bahama Islands	Lee	13298
Barnes Icecap, Baffin Island	Littlewood	14010
Belgium	Jones	13559
England, statistical analytis	Cook	13293
Hungary, southwest	Vajk	13691
Iceland	Hospers	14011
in water covered areas	Nettleton	13434
Italy	Morelli	14009
	Solaini	13698
Castellana caverns	Boaga	13924
offshare, wave height operational index in planning	Glenn	14094
Poland	Olczak	13303
Slovakia, southern	Kolbenheyer	13294
South Africa, Stilfontein gold mine	Weiss	13699
Spain, Avila province	Lozano Calvo	13302
Huelva province	Espinosa de los Monteros	13301
Turkey, Cukurova	Yüngül	13726
Uganda	Uganda Geol. Survey	13915
Great Britain, C^{14} dating in	Godwin	13643
Greece, earthquakes, Larissa region 1892 and 1941	Galanopulos	13358
Guatemala, volcanoes of	Dozy	13398
Gulf coast sedimentary volumes, geophysical data on	Nettleton	14090
Hawaii, earthquake at Kilauea, April 22, 1951	Macdonald	13610
earthquake at Kona, Aug. 21, 1951	Macdonald	13611
magnetic observations	Macdonald	13401
volcanic activity	Finch	13402
Heat, produced by radioactivity	Danilevich	13631
Heat balance, of crust	Nawijn	13390
radioactivity and	Zvyagintsev	13391
Heat flow, Dnieper-Donets basin	Belyakov	13394
Kirkland Lake region, Canada	Leith	13892
Nottinghamshire, England	Bullard	13392
Yorkshire, England	Bullard	13392
Hekla, eruption of, 1947	Thorarinsson	13403
eruption of 1947–48	Einarsson	13648, 13650, 13653
	Kjartansson	13649
	Thorarinsson	13647
Helgoland explosion, seismic studies of	Reich	13341
Helicopters, use in exploration	Lee	13511
Helium, loss of by alpha bombardment	Hurley	13632
Highway engineering, electrical and seismic methods in	Moore	13922
Hotchkiss Superdip	Longacre	13700
Huancayo, magnetic disturbances at	Chapman	13576
Hungary, geophysical exploration in	Vajk	13691
regional geophysics of	Scheffer	13560

	Author	Abstract
Iceland, eruption of Hekla, 1947–48	Einarsson	13648, 13650–13653
	Kjantansson	13649
	Thorarinsson	13647
eruptions of Hekla	Zavaritskiy	13895
gravity measurements in	Einarsson	13297
gravity survey, central-northern part	Hospers	14011
magnetization of lava flows in	Hospers	14025
volcanic activity	Thorarinsson	13403
Ice movement, gravimeter observations of	Crary	13556
India, Deccan trap area, gravity anomalies	Glennie	13306
gravity and magnetic surveys in	Gulatee	13565
magnetic diurnal variations in	Pramanik	14018
Indiana, aeromagnetic maps of counties in	U. S. Geological Survey	13448
Indonesia, volcanic activity 1936–38	Van Bemmelen	13410
Internal constitution, of the earth	Belousov	13425
	Birch	13682, 14075
	Mintrop	14039
	Nishitake	13427
	Shimazu	13426
of planets	Berlage	13683
Internal pressure distribution	Nakamura	13285
Iodine^{129}, half life of	Katcoff	13373
Ion formation at ground level	Hess	13387
Ionization, from radioactive material in the ground	Hultqvist	13882
of atmosphere	Hess	14062
Ireland, density of rocks	Jackson	13567
magnetic declination	Murphy	13836
Island arcs, origin of	Scheidegger	14077
origin and movement	Brouwer	13674
third arc in	Vening Meinesz	13675
Isostatic anomalies, interpretation of	Coron	13823, 13824
Isostatic earth's crust, determination of	Tsuboi	13550
Isostasy, Airy-Heiskanen hypothesis	Egyed	13549
Isotopic abundances, primeval lead	Alpher	13375
Italy, earth current measurements	Beaufils	13838
electrical exploration near Guidonia	Manfredini	13740
electrical resistivity surveys airport site near Rome	Zaccara	13954
Castel di Decima	Zaccara	13955
eruptions of Etna	Ponte	13657
eruption of Etna, 1947	Cucuzza Silvestri	13656, 13897
eruptions of Etna, 1949–50	Tazieff	13896
exploratory drilling Campi Flegrei	Penta	13393
gravity measurements in	Boaga	13820
Bari province	Boaga	13821
gravity surveys, Castellana caverns	Boago	13924

	Author	Abstract
Italy—Continued		
northern Italy	Solaini	13698
regional gravity survey	Morelli	14009
magnetic exploration of Colli Euganei	Morelli	13435
activity of Vesuvius, 1949	Imbò	13409
tilting of ground near Vesuvius	Imbò	13408
volcanic eruptions	Cucuzza Silvestri	13405
volcanic eruptions, Vesuvius	Imbò	13407
Japan, block movement in Nobi plain	Nasu	13906
changes in form of geoid in	Okuda	13554
crustal deformation following Nankaido earthquake	Watanabe	13619
crustal structure	Yoshiyama	13337
deformation at Miura-hanto	Hagiwara	13670, 13671, 13672, 13673
deformation following Kanto earthquate	Danilov	13366
earthquake frequency and and intensity	Kawasumi	13622
earthquakes, Imaichi Dec. 26, 1949	Koshikawa	13871
aftershocks of Imaichi	Kishinouye	13872
	Miyamura	13873
accompanying volcanic activity	Sakuma	13613
near Usu	Minakami	13614, 13615
electrical surveys, Amemasugawa mine	Murozomi	14136
Sankyo mine	Kaneko	14135
Shojingawa mine	Murozumi	14136
Takanokura mine	Satō	13703
eruption of O-shima, 1951	Minakami	13659
eruption of Yakeyama, 1949	Ichimura	13658
Fukui earthquake	Yoshiyama	13337
Kanto earthquake, initial motion	Takagi	13365
magnetic exploration	Hayakawa	13441
	Modriniak	13442
magnetic surveys, Sankyo mine	Kaneko	14135
Takanokura mine	Satō	13703
magnetization of volcanoes in	Rikitake	13577
magnitude of earthquakes in	Tsuboi	13344
Mitaka base-line rhombus, change in	Tsuboi	13669
resistivity surveys, Tamagawa aqueduct	Yamaguchi	13482
seismicity index	Tsuboi	13621
seismic surveys, Toyosuto coalfield	Tateishi	14124
coal fields	Iida	13471
Ube coal field	Iida	14125
vertical earth movements in	Miyabe	13905
volcanic action, geophysical phenomena accompanying	Kizawa	14072
volcano Mihara-Yama, diffraction of radio waves around	Rikitake	13411
magnetic surveys	Rikitake	13412, 13413
Kamachatka, volcanoes	Tomkeieff	13397
Kansas, electrical logging in	Decker	13764
radioactivity logging	McGaha	13771
radioactivity logs	Morgan	13772
seismic velocity problem in western Anadarko basin	Widess	13941
Kilauea, magnetic observations	Macdonald	13401
December 1950, subsidence	Finch	13402
Lanthanum, radioactivity of	Pringle	13372
Laterolog	Doll	13750
Lava, temperature and viscosity, O-shima 1951	Minakami	13659
temperature of consolidation	Imbò	13406
Lead isotopes and age of the earth	McCrady	13633
	Vinogradov	14064
primeval abundance	Alpher	13375
Leveling, precise, Belgium	Jones	13559
Limestone, electrical logging in	Doll	13759
pore structure in	Archie	13761
porosity of, from electrical logs	Tixier	13760
	Wright	13758
Logging, differential temperature	Basham	13977
frequency modulation in	Topper	13748
methods reviewed	Cantos Figuerola	13743
	Walstrom	13745
recent improvements in	Burtin	14140
Love waves, Pacific paths	Coulomb	13336
Luxembourg, altimetric survey in	Gloden	14013
gravity anomalies in	Gloden	14012
seismic regions of	Mihailovič	13359
Madagascar, gravity anomalies	Cattala	13564
Magnetic activity, influence of sunspots	Denisse	13571
diurnal variation, Keles	Ryskina	13835
relation to radiosolar noise	Denisse	13832
Magnetic anomalies, compared with gravity	Garland	13296
graphical evaluation of	Gassmann	13695
over oceanic structures	Press	13837
three-dimensional, interpretation	Gel'fand	14092
U. S. S. R.	Roze	14099
Magnetic bays	Giacomo	13569
Magnetic creep, theory of	Néel	13318
Magnetic declination, calculation	Lundbak	13315
Ireland	Murphy	13836
Magnetic dip, changes accompanying activity of Miharayama volcano	Rikitake	13412, 13413
Magnetic dipole over horizontally stratified earth	Wait	14095
Magnetic disturbances, normality of at Huancayo	Chapman	13576
sudden commencements and impulses	Ferraro	13313
sudden commencements at Amberley, New Zealand	Beagley	14021
Magnetic elements, Mexico	Sandoval	13580
	Tamayo	13299
secular change impulses	Walker	14019

	Author	Abstract
Magnetic exploration, Atiamuri dam site	Modriniak	13442
Colli Euganei, Italy	Morelli	13435
Temiscamingue County, Quebec	Buck	13438
Magnetic exploration for asbestos	Low	13439
Magnetic field of crust, origin	Haalck	13829
Magnetic field of the earth, east component	Korneva	13309
external	Hirayama	13308
measurements at high altitudes	Singer	13311
origin	Bullard	14015
	Haalck	13307
rapid oscillations in	Giacomo	13569
secular variations, shielding	Rikitake	13310
Tréves 380 A. D.	Thellier	13579
variations at Kodaikanal	Sivaramakrishnan	13575
variations, 11-year	Bernard	13833, 13834
rapid	Gibault	13831
secular, in New Zealand	Cullington	13830
Magnetic field, effect on thermal convection	Thompson	13389
long current-carrying wire	Oweh	13570
of stars	Stoyko	14017
Magnetic horizontal intensity, calculation	Lundbak	13315
Magnetic diurnal variations, Konogo district	Gold Coast Geol. Survey Dept	13914
Magnetic logging	Stripling	13963
Magnetic observations, Chambon-la-Forêt	Gibault	13831
of Hawaiian volcanoes	Macdonald	13401
Magnetic observatories, thesaurus of values	Johnston	13314
Magnetic properties, effect of temperature	Roze	13322
of ferrites	Grabovskiy	14022
of rocks and powdered substances	Kondorskiy	14023
of Spavinaw granite	Hawes	13447
of terra cotta and rocks	Thellier	13317
Magnetic pulsations in Keles	Lazarenko	14020
Magnetic storms, relation to radio-solar noise	Denisse	13832
sudden commencements	Nagata	13574
	Sivaramakrishnan	13575
sudden commencements and impulses	Ferraro	13573
geographic distribution of	Afanas'yeva	13572
Magnetic surveys, airborne, Delaware basin, Texas-New Mexico	Hoylman	13445
airborne, eastern Pennsylvania	Jensen	13704
New Zealand, Mernoo Bank	Fleming	13707
airborne and ground, compared	Harper	13928
New Mexico	Harper	13928
south-central Texas	Jenny	13446
Magnetic surveys—Continued airborne and ground—Continued Spavinaw granite, Oklahoma	Hawes	13447
American River dam site	Wantland	14088
Gold Coast	Gold Coast Geol. Survey Dept.	13914
Hungary, southwest	Vajk	13691
India	Gulatee	13565
Ireland	Murphy	13836
Island of Skye	Whetton	13926
Japan, Ō-shima	Rikitake	13412, 13413
Sankyo mine	Kaneko	14135
Takanokura mine	Satō	13703
Tenmabayashi mine	Hayakawa	13441
North Dakota, Rolette and Towner Counties	Kohanowski	13701
South Africa	Enslin	13739
Stilfontein gold mine	Weiss	13699
Yugoslavia, Suvo Rudiste region	Jankovič	13702
Magnetic susceptibility, lateritic soil	Tucker	14098
measurements	Modriniak	13442
of rocks under stress	Kalashnikov	14024
technique of measurement in place	Mooney	14096
Magnetic variations, diurnal, in equatorial regions	Pramanik	14018
in equatorial regions	Price	13312
Magnetic well logging	Broding	13490
Magnetism of massive rotating bodies	Luchak	14016
Magnetization, inverse remanent, in Auvergne	Roche	13320
theory of	Néel	13319
of earth, increase in	Gaibar Puertas	13568
of volcanoes	Rikitake	13577
radioactivity of rocks and	Hée	13886
remanent, Carthage kilns	Thellier	13321
Iceland lava flows	Hospers	14025
Roman kiln near Tréyes	Thellier	13579
reverse thermoremanent	Nagata	14026, 14028
	Néel	14027
Tsukuba-san gabbro	Yokoyama	13578
Magnetometers, airborne	Cheney	13443
calibration and adjustment	Yrizar	13827
earth-inductor type	Rikitake	13437
Hotchkiss Superdip	Longacre	13700
Kew no. 177, calibration	Maino	13828
platform for use with	Nodya	14097
Schmidt	Buck	13438
Tsubokawa	Tsubokawa	13436
Magnetostriction in weak magnetic field	Matsumae	13316
Magnitude of earthquakes, Japan	Tsuboi	13344
Malay Archipelago, earthquake distribution	Koning	13861
Manitoba, exploration problems in Williston basin	Burg	13940
Maps, aeromagnetic, Alberta quadrangles	Canada Geological Survey	13450
aeromagnetic, Indiana counties	U. S. Geological Survey	13448

	Author	Abstract
Maps—Continued		
aeromagnetic—Continued		
Minnesota, St. Louis county	U. S. Geological Survey	13449
New Brunswick quadrangles	Canada Geological Survey	13451
Northwest Territories quadrangles	Canada Geological Survey	13452, 13705, 13929
Ontario	Canada Geological Survey	13453, 13931
Quebec quadrangles	Canada Geological Survey	13453, 13706, 13930
gravity, Asia, southeast	de Bruyn	13557
Brazil	Brasil Conselho nacional	13688
Burma	Gulatee	13565
Caribbean Sea	de Bruyn	13557
Hungary, southwest	Vajk	13691
Hungary western	Scheffer	13560
Iceland	Einarsson	13297
India	Gulatee	13565
Madagascar	Cattala	13564
Pakistan	Gulatee	13565
Poland	Olczak	13303, 13561
Poland northeastern	Wieladek	13819
Spain, Avila province	Lozano Calvo	13302
Spain, Huelva province	Espinosa de los Monteros	13301
isostatic anomaly, Paris Basin	Coron	13823, 13824
Hungary, southwest	Vajk	13691
Hungary, western	Scheffer	13560
magnetic, Ireland	Murphy	13836
seismic, southwest Hungary	Vajk	13691
Yugoslavia	Mihailovič	14060
seismotectonic, Spain	Rey Pastor	13357
tectonic, southwest Hungary	Vajk	13691
Marine sediments, radioactivity of	Kohl	13385
Marine seismic surveying, navigation system	Oil Progress	13512
Mechanical properties of rocks	Jeffreys	14074
Mediterranean region, earthquake distribution, depth, and magnitude	Koning	14056
Mediterranean Sea, microseisms in	Giorgi	13624
Melting-point gradient in earth's mantle	Uffen	14070
Metallic model experiments in electromagnetic exploration	Yost	14130
Meteorites, radioactivity in	Cooper	13634
Mexico, activity at Parícutin November 1949	Termer	13655
earthquakes	Tamayo	13299
eruption of Parícutin	Bullard	13654
gravity measurements	Tamayo	13299
Mexico—Continued		
magnetic data in	Sandoval	13580
magnetic elements	Tamayo	13299
volcanic activity	Fries	13400
volcanoes	Tamayo	13299
Michigan, seismic surveys	Wesley	13724
Microbarograph, piezoelectric	Schaffhauser	13627
MicroLog, description	Doll	13968
principles of interpretation	Guyod	13493
MicroLogging, review of	Ford	13747
Micromagnetic surveys	Jenny	13446
correlation with seismic reflection	Jenny	13925
Microseisms, barometric microvariations related to	Dessauer	13626
compared with sea swell	Donn	13877
effect of cold fronts	Bath	13369
effect on pendulum	Pariyskiy	13295
energy distribution in	Bath	13370
from hurricane of Sept. 13–16, 1946	Donn	13877
international conference on	Lopez de Azcona	13623
in weather forecasting	Macelwane	13368
origin of, in Mediterranean	Giorgi	13624
upper Adriatic	Caloi	13625
period and amplitude	Kishinouye	13876
Pontifical Academy conference on	Lopez de Azcona	13875
2-second, from Great Lakes sources	Lynch	13878
types of	Gutenberg	13367
Mines, electrical exploration in	Belluigi	13737
Mining problems, use of geophysics in	Kelley	13917
Minnesota, aeromagnetic maps, St. Louis county	U. S. Geological Survey	13449
seismic surveys	Allen	14119
Moluccas, geologic structure and gravity anomalies	Gerth	13558
Montana, exploration in Williston basin	Handley	13458
exploration problems in Williston basin	Burg	13940
Moon, ejection of, and 3rd law of Kepler	Quiring	13664
Morocco, earth current measurements	Beufils	13838
Mountain arcs, origin of	Scheidegger	14077
Mud logging	Vellinger	13744
Nebraska, seismic exploration in Denver-Julesburg basin	Rummerfield	13720
Netherlands, Schoonebeek oil fields	Cantos Figuerola	13429
Nevada, earthquakes	Wood	13347
New Guinea, gravity map of	de Bruyn	13557
New Brunswick, aeromagnetic maps of quadrangles	Canada Geological Survey	13451
New Mexico, aeromagnetic surveys, Delaware basin	Hoylman	13445

	Author	Abstract
New Mexico—Continued		
exploration in San Juan basin	Clayton	14087
geophysical activity and drilling in Four Corners region	Umbach	13911
geophysical exploration	Swords	13910
magnetic surveys, ground and airborne compared	Harper	13928
seismic velocities in Permian basin sediments	Daly	13721
New York, gravity and magnetic investigation of Cortlandt complex	Steenland	14093
New Zealand, aeromagnetic survey, Mernoo Bank	Fleming	13707
earthquake wave periods	Hayes	13860
earthquakes, in Cook Strait, Jan–Feb. 1950	Hayes	13780
in 1949	Hayes	13868
in 1950	Hayes	13869
electrical logging, water wells	McKellar	13766
magnetic secular variation	Cullington	13830
magnetic sudden commencements at Amberley	Beagley	14012
sea floor west of	Brodie	14081
volcanic eruption, Ngauruhoe	Battley	13414
Ngauruhoe, eruption of 1949	Battey	13414
Nicaragua, volcances in	Zavala	13399
Nitrogen^{15}, abundance in oil and coal	Smith	13384
Nomogram, tidal deviations of vertical	Malone	13811
Norite, radioactivity in	Picciotto	13635
North America, Pacific coast, earthquake distribution, depth, and magnitude	Koning	14056
tectonic divisions of	Eardley	13678
North Dakota, exploration in Williston basin	Handley	13458
exploration problems in Williston basin	Burg	13940
magnetic surveys, Rolette and Towner Counties	Kohanowski	13701
Northwest territories, aeromagnetic maps of quadrangles in	Canada Geological Survey	13452, 13705, 13929
Oil, N^{15} abundance in	Smith	13384
Oklahoma, connate-water resistivity	Puzin	13973
exploration problems in Anadarko basin	Clayton	13457
magnetic surveys, Spavinaw granite area	Hawes	13477
seismic velocity problem in western Anadarko basin	Widess	13941
Velma pool, electrical log analysis	Wyllie	13500
Ontario, aeromagnetic maps	Canada Geological Survey	13453, 13931
radioactivity Round Lake batholith	Slack	14067
southwestern, gravity and magnetic anomalies	Garland	13296
Oregon, earthquakes in	Byerly	13864
Origin of the earth	Colton	13424
Orogenesis, as fundamental geologic process	Wilson	13902
contraction hypothesis of	Scheidegger	14078
convection-current hypothesis	Scheidegger	13903
experiments at Dalhousie University	Douglas	13415
rhythm and synchronism	Umbgrove	13416
Oscillographs, lamps for	Tajime	13510
P^*, velocity, Fukui earthquakes	Yoshiyama	13337
P, velocity, Fukui earthquakes	Yoshiyama	13337
P_n, velocity, F ukui earthquake	Yoshiyama	13337
Pacific coast earthquake	Byerly	13864
Pacific Ocean, gravity measurements in	Worzel	13814
tectonics of Tasman Sea area	Brodie	14081
volcanic arcs of	Matschinski	13395
Paricutin, activity of	Bullard	13654
activity in November 1949	Termer	13655
activity January–June 30, 1951	Fries	13400
activity July 1–Dec. 31, 1951	Fries	14073
Paris Basin, isostatic anomalies in	Coron	13823, 13824
Pendulum, effect of microseisms on	Pariyskiy	13295
Pendulum-driven motor, accuracy of	Tajime	13508
Pennsylvania, airborne magnetic survey	Jensen	13704
Permafrost, geothermal investigations in	MacCarthy	13891
Permeability, determination by electrical measurements	Howell	13498
directional in Bradford sand	Griffths	13497
Persia, seismic surveys, asymmetrical structures	Germain-Jones	13727
Petroleum, radioactivity and origin of	Breger	13637
Philippine Islands, gravity map	de Bruyn	13557
Plasticity, flow of glaciers as problem in	Nye	13418
Poland, gravity investigations	Olczak	13303
gravity map of	Olczak	13561
gravity measurements in	Weiladek	13819
Poles, displacement of	Kulikov	13666
movement of 1946–48	Carnera	14082
Porosity, correlation with resistivity	Howell	13495
Porosity index in limestone	Tixier	13760
Porosity-profile determination from electrical logs	Wright	13758
Potassium, radioactivity of	Danilevich	13631

	Author	Abstract
Poulter method, description	Baxter	13936
Poulter method of surface shooting, objection to	Clayton	13466
Punched-card methods, use of in geophysical interpretation	Sharpe	14086
Quebec, aeromagnetic maps	Canada Geological Survey	13454, 13706, 13930
magnetic exploration, in Temiskamingue County	Buck	13438
Thetford area	Low	13439
magnetic survey of Ungava Crater	Meen	13440
Queen Charlotte Islands, earthquake	Coulomb	13336
Radiation detectors, use of	Lang	14958
Radiation intensity surveys, in petroleum exploration	Merritt	13959
Radioactive minerals, ionization from	Hultqvist	13282
Radioactivity, air at Puy-de-Dôme	Garrigue	13638
airborne surveying for	Cook	14138
heat balance and	Zvyagintsev	13391
Ikuno copper mine	Sadahiro	13488
in eruptive rocks	Picciotto	13635
in geologic problems	Picciotto	13629
in rocks and meteorites	Cooper	13634
magnetization of rocks and	Hée	13886
North Atlantic deep sea cores	Kulp	14066
of earth, part of potassium in	Danilevich	13631
of lava from summit of Vesuvius	Ippolito	13883
of Lavey spring water	Binggeli	14069
of marine sediments	Kohl	13385
of surface and ground water	Love	13386
origin of petroleum and	Breger	13637
Puy de Dôme	Garrigue	13388
rhythm of sedimentation and	Norin	13636
Round Lake batholith, Ontario	Slack	14067
Skane drill cores	Norin	13636
Radioactivity anomalies, near oil fields	Lundberg	13742
	Merritt	13741
Radioactivity detector, portable	Franklin	13484
uses of	Stein	13483
Radioactivity logging, corrections in	Hée	14141
in limestone	Archie	13761
instrumentation for	Swift	13767
Kansas	McGaha	13771
	Morgan	13772
simultaneous gamma-ray and neutron	Swift	13767
simultaneous recording	Mercier	13507
Spraberry formation	Mardock	13506
well logging in	Lytle	13505
uses of	Camobell	13504
Witwatersand system	Simpson	13503
Witwatersand	Simpson	13769
Radioactivity logs, in reef limestone	Bush	13770
neutron, interpretation of	Russell	13976
use in electric log interpretation	Wyllie	14139
quantitative interpretation	Bush	13975
	Fearon	13768
Radioactivity surveying, airborne	Cook	14138
	Lundberg	13742
	Peirson	13489
for petroleum	Merritt	13741
near faults	Ochial	13487
Radioactivity surveys, in petroleum exploration	Lundberg	13960, 13961
Radiocarbon dates	Arnold	13379
	De Geer	13382, 13383
	Johnson	13378
Radiocarbon dates in Mexico	de Terra	13381
Radiocarbon dating, errors in	Bartlett	13380
Pacific chalk ooze	Arrhenius	13888
Radio electromagnetic waves, diffraction around crater of Mihara-yama	Rikitake	13411
Radio wave transmission demonstration Grand Saline, Tex	Barret	13957
methods of exploration	Börner	13951
attenuation through earth	Pritchett	13735
Radium content, deep-sea sediments	Bernert	13887
Rayleigh-wave coupling to atmospheric compression waves	Jardetzky	13844
Reef limestone, radioactivity logs in	Bush	13770
Reservoir rocks, carbonate, classification of	Archie	13761
characteristics of	Griffiths	13763
electric log data to determine properties of	Wyllie	13753
grain-size distribution in	Griffiths	13763
Resistivity logs, differential, interpretation of	Keller	13494
Resonance phenomena in ground-seismograph system	Pasechnik	13934, 14105, 14106
Rhineland, earthquakes in	Schwarzbach	13865
Rift valleys, gravity anomalies in	Gogucl	13562
Rock bursts, origin of	Grigor'yev	13880
region of	Avershin	13879
in Kizel basin coal mines	Avershin	13879
Rotation of the earth, seasonal variation of	Stoyko	13291
S wave, recorded motion at Florissant	Heinrich	13858
Safety and geophysical exploration	Sorge	13692
Salt domes, internal reflections in	Krey	13719
seismic investigations of	Brinckmeier	13469
seismic refraction surveys of	Gees	13725
	Helms	13470

	Author	Abstract
Salt domes—Continued		
seismic surveys, Hamburger Loch	Helms	13943
Salt solution, a seismic velocity problem	Widess	13941
San Andres dolomite, quantitative log interpretation	Scotty	13502
Sand lens, location by seismic surveys	Ingalls	13722
Sandstone, elastic wave velocity in	Hughes	14117
porosity and saturation from electric logs	Jones	13762
seismic velocities in	Baule	13339
San Juan basin, geophysical exploration in	Clayton	14087
Saskatchewan, exploration problems in Williston basin	Burg	13940
Saturation, effect on elastic wave velocity	Hughes	14117
Scale model experiments in electro magnetic exploration	Clark	14131
Scandinavia, microseismic effects of cold fronts	Bath	13369
microseisms in	Bath	13370
Schmidt magnetometer, theory and operation	Buck	13438
Scintillation counters, applied to geophysical problems	Whitham	14068
for low-level alpha counting	Kulp	13486
Scotland, gravity measurements at Aberdeen	Bullerwell	13816
gravity measurements at Edinburgh	Bullerwell	13816
magnetic surveys Skye Island	Whetton	13926
Second derivative values, effect of random errors on	Elkins	13432
Sedimentation rates by C^{14} measurements	Kulp	13640
Sediments, deep-sea, radium content	Bernert	13887
Tertiary, seismic velocities in	Rühmkorf	13468
Seismic amplitude, relation to charge size	Habberjam	13465
Seismic exploration, amplitude and frequency in	Hayakawa	14107
control of variables in	Handley	13935
current trends in	Harris	13455
determination of refracting boundary in	Riznichenko	13460
effects of errors in measurements	Krousky	13718
interlocking recording in	Krey	13712
nonstructural hypothesis	Rosaire	13709
precision of travel-time curves in	Fitch	13716
problems in	Hayakawa	14107
surface shooting in	Baxter	13936
textbook	Dix	14102
use of Poulter method in	Clayton	13466
uses and abuses	Weatherby	13456
Seismic exploration corrections, relation to surface geology	Thralls	13717
Seismic exploration methods, for engineering problems	Linehan	13942
Seismic exploration records, using equal sensitivity	Berson	13459
effect of different receiver sensitivity in	Berson	13459
Seismicity index number, Japan	Tsuboi	13621
Seismic reflections, location of sand bars by	Ingalls	13722
multiple, Edwards Plateau	Poulter	13467
travel times of	Bugaylo	14113
within salt domes	Krey	13719
Seismic reflections, surveys, across faults, significance of diffraction	Krey	14120
correlation with micromagnetic surveys	Jenny	13925
determination of reflecting boundaries	Contini	14114
for mapping faults	Romberg	14121
in near-surface exploration	Allen	14119
Seismic refraction investigations of salt domes	Helms	13470
Seismic refraction surveys, eastern Atlantic	Hill	14049
in engineering problems	Bird	14089
in foundation engineering	Johnson	14103
limitation of	Evison	14118
new instrument for	Gough	13710
North Atlantic	Gaskell	13338
north of Brownson Deep	Hersey	14048
procedure in	Cantos Figuerola	13713, 14109
salt domes, northwestern Germany	Gees	13725
of salt domes	Brinckmeier	13469
using sledge hammer as energy source	Gough	13710
V-shaped valley	Solaini	13723
Seismic sounding of the earth's crust	Gamburtsev	13848
Seismic surface waves, air coupled	Haskell	13594
caliche-covered area in New Mexico	Eisler	13939
dispersion	Ewing	14044
effect of internal friction on	Caloi	13593
in the ocean bottom	Biot	13592
Love, dispersion curves	Satō	13589, 13590
generation of	Satō	14033
in double surface layer	Satō	13589
in heterogeneous medium	Satō	13591
Queen Charlotte Is. earthquake	Coulomb	13336
velocity	Satō	13587
new type	Wood	13601
plane-parallel layer over elastic semispace	Keylis-Borok	13329
Rayleigh, condition of non-generation	Satō	14034
in ocean bottom	Biot	13592
velocities	Knopoff	14041
slow, across North America	Press	14043
Stoneley, in ocean bottom	Biot	13592
vertical component of for magnitude determinations	Bath	13342

	Author	Abstract
Seismic surface waves—Continued		
very short period	Caloi	13593
velocity in elastic plates	Satō	13588
Seismic surveys, marine, navigation system	Oil Progress	13512
air drilling in	Burke	13944
American River dam site	Wantland	14088
Arctic ice islands	Crary	14050
Atlantic Ocean	Officer	13852
Denver - Julesburg basin, Colo.-Neb	Rummerfield	17320
Edwards Plateau, Poulter method in	Poulter	13467
effects of salt solution on velocities in	Widess	13841
Hamburger Loch salt domes	Helms	13943
inadequacy of for shallow exploration	Evison	14118
in highway engineering	Moore	13922
Japan, coal fields of	Iida	13471, 14125
	Tateishi	14124
New Mexico, caliche area	Eisler	13939
Michigan	Wesley	13724
Persia, asymmetrical anticlines	Germain-Jones	13727
southwest Hungary	Vajk	13691
Texas, Kilgore area	Towles	14104
Turkey, Çukurova	Yüngül	13726
Seismic velocity-depth relation, method of determining	Kokesh	13937
Seismic velocity logging	Summers	13964
Seismic velocity logging method	Vogel	13965
Seismic well velocity surveys, compared with delta-time analyses	Swan	13938
new method	Kokesh	13937
Seismic wavelets, propagation of	Ricker	13586
Seismic waves, absorption coefficient of	Yepinat'yeva	14108
air-coupled	Benioff	13334
angles of emergence of	Savarenskiy	14036
attenuation of	Evison	13463
energy relationships at rock-water boundary	Ergin	14045
equation of frequency of	Keylis-Borok	14032
first motions in, Pasadena and Huancayo	Båth	13854
frequency analysis	Jakosky	14116
frequency of	Menzel	13715
from explosions	Menzel	13933
frontal, wave path near receiving station	Riznichenko	13714
Fukui earthquake	Yoshiyama	13337
in vertically stratified medium	Berson	14110
laboratory model studies of	Kaufman	13600
longitudinal, dispersion of	Altenburg	13839
longitudinal, through core	Denson	13855
multiply refracted	Berson	14112
*P**, velocity in central Italy	Di Filippo	13607
periods	Hayes	13860
recorded ground motion of *P*, *PcP*, *S*, and *ScS*	Ergin	14042
refraction with lower velocity layer	Gamburtsev	13461
S', identification of	Suzuki	13332
SV and *SH*	Gutenberg	13856
shear, motion in	Heinrich	13858
shear, vibration directions	Dehlinger	13857
T-phase	Ewing	13333
T-phase, nature of	Coulomb	14046
T, propagation	Coulomb	13859
travel time curves of in stripped earth	Stechschulte	14040
travel time curve, (n–1) segment of	Bugaylo	14111
up-hole travel times	Woods	13711
velocity, as method of prediction	Gamburtsev	13848
in concrete	Andersen	13602
Manix earthquakes	Richter	13606
by delta-time analysis and well surveys	Swan	13938
from Helgoland explosion	Reich	13341
in interior of earth	Birch	14075
in sediments	Rühmkorf	13468
iteration procedure for determining	Krouskij	14115
Japan	Kanai	13853
Peissenberg coal mine	Reich	14123
Permian basin sediments, Tex.-N. Mex	Daly	13721
southern California	Gutenberg	13851
variation with depth	Contini	14114
variation with depth and distance	Hattori	13609
variation with saturation	Hughes	14117
variation with time	Hayakawa	13608
Seismicity, evaluation of	Gubin	13849
Seismograms, interpretation of	Neumann	13850
Seismograph, Haeno	Hayakawa	14107
strain, response to surface waves	Benioff	14038
vectorial, response to surface waves	Benioff	14038
with electronically adjustable constants	Gassmann	13596
with one degree of freedom	Gassmann	13597
Wood-Anderson, simplified model	Tandon	13598
Seismograph-ground system, natural vibrations in	Pasechnik	13934
resonance phenomena in	Pasechnik	14105, 14106
Seismology, bibliography of	Milne	13326, 13327, 13328
Seismology, observational	Jeffreys	14074
review	Tandon	13605
Seismometer, hinged, theory of	Byerly	14037
Seismotectonic zoning	Gubin	13849, 14053
Selp-potential log in shaly sands	Doll	13971
Shales, marine organic, radioactive elements in	Breger	13637
Siberia, thickness of crust in	Gayskiy	13603
Slovakia, gravity surveys	Kolbenheyer	13294
Snow, radioactive	Garrigue	13388

	Author	Abstract
Sound ranging in medium of unknown constant phase velocity	Schriever	14122
South Africa, geophysical surveys for water	Enslin	13739
radioactivity logging in Witwatersrand	Simpson	13769
Stilfontein gold mine, geophysical surveys	Weiss	13699
Witwatersrand earthquakes, focal depth	Gane	14047
South America, earthquake distribution, depth, and magnitude	Koning	14054
South Dakota, exploration problems in Williston basin	Burg	13940
Southern Antilles, earthquake distribution, depth, and magnitude	Koning	14055
South West Africa, seismicity of	Korn	13618
Spain, Avila province, gravity survey	Lozano Calvo	13302
earthquakes, Caravaca region, Murcia	Rey Pastor	13352
Caravaca region, Murcia, June 23, 1948	Rey Pastor	13356
Confrides (Alicante) Feb. 9, 1949	Rey Pastor	13357
in Alicante June 9, 1947	Rey Pastor	13355
in Catalonia 1948–49	Fontserè	13353
near Elche, 1947	Rey Pastor	13354
geophysical investigations 1950	Garcia Siñeriz	13430
gravimetric network in Lozano	Calvo	13551
Huelva province, gravity survey	Espinosa de los Monteros	13301
seismicity of Granada Basin	Tercedor	13616
Spraberry formation, induction logs	Lytle	13505
radioactivity logs	Lytle	13505
	Mardock	13506
Strain waves in rock	Obert	13599
Stress-differences in the earth	Jeffreys	14074
Stress generating no Rayleigh waves	Satō	14034
Tadzik S. S. R., earthquakes, Garmaskaya Oblast' 1949–1950	Monakhov	13867
Tasman Sea, tectonic movements in	Brodie	14081
Tectonic divisions of North America	Eardley	13678
Tectonic theories, review	Fourmarier	13900
	Gallwitz	13899
Telluric currents, prospecting by	Migaux	13733
Telluric exploration method, quantitative interpretation in	Baranov	13734
Temperature, Campi Flegrei, Naples	Penta	13393
distribution within earth	Uffen	14070
effect on magnetic properties of rocks	Roze	13322
Temperature—Continued		
fresh lava, Ō-shima	Minakami	13659
increase of by adiabatic compression	Valle	13644
of consolidation of lava	Imbō	13406
Temperature gradient, adiabatic, in earth's interior	Valle	13890
Temperature logging	Basham	13977
Texas, airborne magnetic surveys, Delaware basin	Hoylman	13445
airborne magnetic survey, serpentine district	Jenny	13446
Edwards Plateau, seismic exploration in	Poulter	13467
exploration problems in Anadarko basin	Clayton	13457
geologic and geophysical interpretation of structure in Kilgore area	Towles	14104
geophysical exploration in Permian basin	Swords	13910
radiowave transmission demonstration Grand Saline	Barret	13957
San Andres dolomite, log interpretation in	Scotty	13502
seismic velocities, Permian basin sediments	Daly	13721
seismic velocity problem in western Andarko basin	Widess	13941
Thermal anomalies, Pechelbronn region, France	Claude	13893
Thermal convection in magnetic field	Thompson	13389
Thermal gradients, Arctic slope, Alaska	MacCarthy	13891
Dnieper-Donets basin	Belyakov	13394
Donbass, U. S. S. R.	Kashpur	14071
Nottinghamshire, England	Bullard	13392
Thermal history of the earth	Jeffreys	14074
Thermal instability in a sphere	Jeffreys	13889
Thermal investigations, western Hungary	Scheffer	13560
Thermal radiation in volcanic crater	Fournier d'Albe	13898
Thorium, evaluation of by autoradiography	Imbō	13885
Thorium-uranium analysis by scintillation counting	Whitham	14068
Thoron alpha activity, discrimination of	Hurley	14063
Tibet, earthquake Aug. 1950	Kingdon-Ward	13364
Tidal deviations of the vertical	Malone	13811
Tidal gravity experiments	Tarrant	13809
	Tomaschek	13810
Tilt, relation to volcanic activity, Vesuvius	Imbō	13408
Titanium content, as method of age determination	Arrhenius	13888
Topography, mathematical expression of	Jung	13289
relation to earthquake damage	Nakano	13620

	Author	Abstract
Torsion balance, best use of determination of local gravitational field by	Haalck	13431
	Haalck	13806
T phase, circum-Pacific shocks nature of	Ewing	13333
	Coulomb	14046
propagation in Caribbean	Coulomb	13859
Transducer, voltage-sensitivity of	Tajime	13509
Tunis, resistivity surveys, hydraulic sills	Castany	13481
Turkistan, earthquakes	Gubin	14053
Turkey, earthquakes, 1947 to 1949	Lahn	13866
gravity and seismic surveys, Cukurova	Yüngül	13726
Uganda, Geological report 1950	Uganda Geol. Survey	13915
Uller's waves	Officer	13331
Ungava Crater, magnetic surveys	Meen	13440
United States, earthquake history	Wood	13347
earthquakes in 1950	Murphy	13863
U. S. Coast and Geodetic Survey, seismological activities, 1950	Roberts	14052
U. S. S. R., earthquakes in Caucasus region	Belousov	14058
earthquakes in Garmskaya Oblast	Gubin	14057
magnetic anomalies	Roze	14099
rock bursts, Kizel basin	Avershin	13879
seismicity of Akhalkalaki plateau	Kirillova	14059
seismic sounding of crust in thermal measurements, Dnieper-Donets basin	Gamburtsev	13848
	Belyakov	13394
thermal gradients, Donbass	Kashpur	14071
Uranium, evaluation of by autoradiography	Imbô	13885
Uranium ^{235}, half life of	Fleming	13371
Uranium X_3, gamma radiation from	Hess	14062
Uruguay, petroleum exploration in	Ferrer	13687
Utah, exploration in San Juan basin	Clayton	14087
geophysical activity and drilling in Four Corners region	Umbach	13911
Variation of latitude	Carnera	14082
	Kulikov	13666
	Jeffreys	14074
Vesuvius, activity in 1949	Imbô	13409
eruptive activity of	Imbô	13407
radioactivity of lava from summit	Ippolito	13883
tilting of ground	Imbô	13408
Vibrations from blasting	Morris	13472
Viscous liquids, compared with elastic solids	Szebehely	13420
Viscosity, fresh lava, Ō-shima	Minakami	13659
of surface layer, effect on earthquake movements	Kanai	13845
Volcanic activity, Etna 1947	Cucuzza Silvestri	13405
Hekla	Thorarinsson	13403
Indonesia, 1936–48	Van Bemmelen	13410
origin of fault troughs and	Escher	13904
Parícutin, 1951	Fries	13400, 14073
Vesuvius 1949	Imbô	13409
Volcanic arcs, cartographic radius of	Matschinski	13395
curvature	Matschinski	13396
linear density	Matschinski	13396
Volcanic craters, of moonform	Richter	13660
Volcanic earthquakes, Usudake, Japan	Minakami	13614, 13615
Volcanic eruptions, earthquakes associated with, Yakeyama, Japan	Sakuma	13613
effect on climate	Martin	13894
Etna, 1947	Cucuzza Silvestri	13656, 13897
Etna, 1949–50	Tazieff	13896
geophysical phenomena accompanying	Kizawa	14072
Hekla, Iceland, 1947–48	Einarsson	13648, 13650–13653
	Kjartansson	13649
	Thorarinsson	13647
Hekla, Iceland	Zavaritskiy	13895
Mihara-yama 1950, diffraction of radio waves following	Rikitake	13411
New Zealand, Ngauruhoe	Battey	13414
Ō-shima, 1951	Minakami	13659
Palmas, 1949	Bonelli Rubio	13404
Parícutin	Bullard	13654
November 1949	Termer	13655
relation of tilting to, Vesuvius	Imbô	13408
Vesuvius	Imbô	13407
Yakeyama, 1949	Ichimura	13658
Volcanic investigations, Etna	Ponte	13657
Volcanoes, Guatemala	Dozy	13398
Kamchatka	Tomkeieff	13397
Kilauea subsidence	Finch	13402
magnetic observations on	Macdonald	13401
magnetization of	Rikitake	13577
Mexico	Tamayo	13299
Nicaragua	Zavala	13399
Volcanic material, radioactivity in	Ippolito	13883
Washington, earthquakes and gravity anomalies near Seattle	Heiskanen	13348
earthquake of April 13, 1949	Nuttli	13335
Water, ground, radioactivity of	Love	13386
surface, radioactivity of	Love	13386
Water resources, electrical exploration for, Italy	Manfredini	13740
electric logs in search for	Morris	13967
electrical methods of explorations	Deutsch Verein von Gas- und Wasserfachmannern	13949

	Author	Abstract
Water resources—Continued		
geophysical exploration for, South Africa	Enslin	13739
geophysical methods of exploration for	Dixey	13919
	Schneider	14137
Water wells, electrical logs in, New Zealand	McKellar	13766
Wave functions, transformation of	Satō	13581, 13582
Wave height operational index	Glenn	14094
Well logging, in petroleum engineering	Vance	13921
Well logging instrumentation	Stripling	13963
Williston basin, geophysical exploration in	Handley	13458
Wisconsin, electrical resistivity surveys near Antigo	Spicer	14134
Witwatersrand, seismic investigations in	Willmore	13340
Witwatersrand system, radioactivity logging	Simpson	13503
Young's Modulus, measurement under uniaxial compression	Shimozuru	13676
Yugoslavia, earthquakes in	Mihailović	14060
earthquakes, Bačka and Baranja regions	Uzelac	13362
Knin region	Nedeljković	13363
Lake Scutari region	Mihailović	13361
Litija region	Mihailović	13360
magnetic surveys, Suvo Rudiste region	Janković	13702
seismicity of Morava valley	Mihailović	1361

INDEX OF PATENTS

	Inventor	Abstract
Acoustic logging	Tullos	13542
Acoustic measurements in boreholes	Goble	13799
Airborne electromagnetic exploration	Cartier	14165
Airborne magnetic surveying	Jensen	13776, 13982
	Klaasse	13981
	Rumbaugh	13983
Airborne magnetometer cable	Schonstedt	13515
Borehole gravity gradiometer	Boucher	14144
Capillary pressure measurements	Purcell	14001
Casing collar locator	Basham	14000
	Herzog	13536
	Swift	13999
Core analysis	Angona	14003
Drill hole magnetometer	Brant	13801
Electrical exploration method	Bilhartz	14162
	Brant	13790, 13991
	Kunetz	14164
	Lee	14161
	Nichols	14163
Electrical logging apparatus	Homer	14179
	Owen	14002
	Pearson	13543
Electrical logging instrument	Niles	13544
Electrical logging method	Waters	14177
Electromagnetic detecting device	Muffley	13992
Electromagnetic exploration, airborne	Cartier	14165
Electromagnetic exploration apparatus	Barret	13532
Electromagnetic exploration method	Barret	13531
Electromagnetic logging system	Doll	13537
Elevation meter, damping device for	Eisler	14182
Fluid flow in boreholes, measurement	Craggs	14178
Formation factor, method of determining	Patnode	13545
	Wyllie	13546
Galvanometer	Fisher	13802
	Hendricks	14183
Geiger-Müller tube construction	Krasnow	13996
Geophone	Alexander	13517
Gravity exploration, underwater	Mounce	13773
Gravity gradiometer	Boucher	14144
Inclinometer	Hildebrandt	14174
	Young	14176
Induction logging, coil system	Doll	13538
Ionization chamber	Rose	13794
	Scherbatskoy	13997
Gravity meter	Boucher	13978
	Cloud	14143
	Jakosky	14142
	Walsh	13513
Line fault detector	Brownlow	13547
Magnetic logging system	Zimmerman	14181
Magnetic testing system	Means	14146
Magnetometer	Arvela	13775
	Brewer	13980
	Frowe	13514
	Kogbetliantz	13774
Magnetometer, drill-hole temperature compensation indicator	Brant	13801
	Lee	14145
Magnetometer gradiometer	Mayes	14147
Magnetometer head	Brattain	13979
Neutron logging	Arps	13539
	Thayer	13540, 13541
Pressure measurements in wells	Long	13798
Proportional counter	Borkowski	13791
Radioactivity exploration method	Herzog	13533
	Lord	14166
Radioactivity logging	Krasnow	13795, 13796
Radiation counter	Bernstein	14170
	Simpson	13998
Radiation detector	Beckman	14171
	LeVine	14169
	Neufeld	13994
	Schneider	13792
	Siegert	13793
	Simpson	13993
Radiation detector circuit	Weller	14167
Radiation detector and discriminator	Lichtman	13534
Radiation meter	Constable	13535
Radiation survey instrument	Herndon	13995
	Zollers	14168
Seismic amplifier control	Fay	13787
Seismic exploration, elevated charges in	Poulter	14152, 14154
method of firing	Poulter	14153, 14151
Seismic exploration apparatus	Groenendyke	13528
	Winterhalter	13987
Seismic exploration cable, with polarized outlets	Winterhalter	13519

	Inventor	Abstract
Seismic exploration method	Barthelmes	13783
	Green	13782
	Mann	13984
	Minton	13784
	Ording	14158
Seismic exploration method, marine	Carlisle	14155
	Doolittle	14148
	Parr	13525
selector arrangement	McLoad	13529
underwater	Finn	13785
Seismic mixing	Bayhi	14195
Seismic recording method	Lee	14175
Seismic recording system	Volk	14150
Seismic-reflection exploration method	Wolf	13516
Seismic-wave amplifier	Hawkins	13990
Seismic-wave direction determination	Piety	14149
Seismic-wave filter	Menton	13530
	Ricker	13527
Seismic-wave generation	Heiland	17388
	Simon	13526
Seismic-wave generator	Silverman	13988
Seismograph frame structure	Crede	13524
Seismograph record analysis	Hawkins	13985
Seismometer	Eisler	13779
	Petersen	13786
	Piety	13781
	Thomas	14160
Seismometer, continuous line	Foster	13518
electromagnetic	Congdon	13520
underwater	Woods	13780
Seismometer coupling, testing	Mayne	13777
	Parr	13778
Seismometer spread, marine	Doolittle	14148
	Pottorf	13989
	Reid	13986
Sonic shear waves, method of application	Seavey	13523
Sound waves, generation and transmission	Seavey	14156
Temperature measurements in wells	Long	13798
Underwater detector	Kendall	13522
Vibration data, method of recording	Perry	13521
Vibration detector	Eisler	13779
Viscosity measurements in wells	Long	13798
Well fluid-level indicator	Mathews	14175
Well-logging apparatus	Long	13798
Well-logging recording system	Sewell	14180
Well-surveying apparatus	Krueger	13800
Well-surveying instrument	Ring	14172
Well-surveying instruments, circuit control	Butterworth	13798
Well tester	West	14173

241162—53——7